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THE BRADSHAW LECTURE.

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On Modern Rhinology.

The Bradshaw Lecture, which I have the pleasure to deliver before you today, was founded in honor of the late Mr. William Wood Bradshaw, a member of this College, by his widow, who wished thus to perpetuate the memory of an honorable member of our profession. I do not know that I can do better than devote this lecture to a subject in which the honor of our profession is nearly concerned.

The diseases of the nose have, in the last decade, obtained an amount of attention on the part of certain members of the profession which their importance seems scarcely to justify. The literature of the subject has grown apace, and I need only to lay before you the massive volume by Bosworth, of New York, to give you an idea of the activity which distinguishes the so-called rhinologist, in this and other countries. I have waded through most of the British authors who have written on this special subject, and some of the foreign authorities, and I say advisedly that the amount of progress bears no proportion to the amount of literary activity displayed since the date of the well-known paper by Dr. Meyer, of Copenhagan, communicated in 1869 to the Royal Medical and Chirurgical Society, by the late Mr. John Marshall. In this paper, the whole subject of adenoid growths in the naso-pharyngeal cavity was brought prominently before the profession, and it has borne fruit abundantly in every treatise which has been subsequently published. As regards other modern discoveries in pathology, and treatment of diseases of the nasal cavities, it may be tersely stated that a good deal of what is new is not true.

I do not propose to revive the old controversy of "General *versus* Special," which ran its tedious length some years ago without any particular result; I have however to thank the President of the British Laryngological and Rhinological Association for a phrase which he was reported, in a daily paper, to have used in an inaugural address in which he spoke slightingly of the "all-sufficient general surgeon," as compared with what I would venture to term the "self-sufficient special surgeon." I hope before the close of this lecture to show that the general surgeon, is in the matter of diseases of the nose, "all-sufficient," and that he owes little or nothing to the specialist. Let me take, for example, the treatment of fracture and displacement of the nasal bones and septum. The name of William Adams is at once suggested by the flat-bladed forceps and vulcanite wedges which he successfully introduced, and which in his own hands and those of many other general surgeons have proved most efficient. So also with that terrible deformity which used to be called "lipoma nasi," consisting in hypertrophy of the skin of the nose, with blocking and distension of the sebaceous follicles. One need only refer to the standard works of Liston and Ferguson to find graphic portraits of such cases, which were treated then, as now, when they occurred, by the old process of paring away the hypertrophied mass and inducing healthy granulation.

But it is the interior of the nose which has proved the happy hunting ground of the modern rhinologist, and here, let me say, that the nasal speculum, in all its varieties, is no new instrument; and that the improved methods of illumination, whether by gas, electricity, or lime light, are but ingenious adaptations of current science, which may or may not be preferable to direct or reflected sunlight. The use of a solution of cocaine, too, is no doubt of service in rendering both examination and manipulation of the cavity of the nose painless, but I am not aware that its employment is confined to the so-called nasal specialists. Given a patient with the nose well cocainized, it is by no means difficult to light up effectually, at least the anterior part of the nasal cavity, provided the septum be median and straight; and then comes the important question: "What is the proportion of straight noses, to say nothing of deviated septa?" Robertson, an American surgeon, in an examination of 240 cases, found abnormalities of the nose in 217, and Bosworth, the voluminous author, to whom I have already referred says, (p. 292): "It is worthy of note that deformities of the external nose are of far more frequent occurrence than is generally supposed, for if we examine a given number of individuals with a plumb-line, we will find the tip of the nasal organ deviating from the median line of the face in quite a large proportion of cases."

As regards the septum, Theile found that in 117 skulls the septum was unsymmetrical in 88, or 73 per cent. Semelder in 49 crania met with deviation in 79 per cent., and Zuckerkandl in 370 skulls met with deviation of the septum in 140 instances.

The late Sir Morell Mackenzie investigated the question by laboriously examining the collection of skulls in the Museum of this College. The total number of crania examined was 3,102, but of them only 2,152 had the bony septum in sufficient preservation to be tested, and these showed a more or less unsymmetrical position of the septum in 1,657 cases, or 76.9 per cent. "It must be remembered that these figures have reference only to the *bony* septum, and that deviations of the cartilaginous part probably occurred in a large proportion of those cases in which the bone itself was straight." (Mackenzie Diseases of the Throat and Nose, vol. 2, p. 433).

But apart from deformities actually existent, it is quite possible to mistake perfectly natural conditions for morbid ones. I know of no more instructive or straightforward remark upon this subject than that of Dr. Cresswell Baber, of Brighton, who, in his valuable little book on the examination of the nose, says (p. 82): "Thickening of the mucous membrane is especially marked opposite the anterior end of the middle turbinated bones where the accumulation of glandular elements leads to the formation of a distinct prominence—the tuberculum septi, first described by Morgagni, and recently figured by Zuckerkandl. When I first recognized this eminence in the septum I was for some time at a loss to account for its presence, but on studying Zuckerkandl's description of the tubercle in the dead subject, I recognized that it was in reality the tubercle which I had before me. It is commonly seen on both sides of the same individual."

Any one who has had, as I have, the opportunity of making sections of the nose in the dissecting room for many years in succession, will know how rare it is to find a septum perfectly straight, and yet how much rarer it is to find anything approaching a "spur" or outgrowth which could in any way interfere with nasal respiration, still less affect the Eustachian tube. And yet from the publication of certain nasal specialists one gathers that outgrowths from the septum which require removal with the saw or electric wire are now commonly met with, and that in fact no man's, still more, no woman's nose, can be considered sound until a "free run" has been established on both sides of the median line. Bosworth (p. 292), goes so far as to say: "I regard septal deformities as responsible in the large majority of cases for the whole train of symptoms, direct and indirect, which are embraced under the term chronic hypertrophic rhinitis."

Some months ago a Fellow of this college was good enough to forward to me a syllabus of a paper he proposed to read before the Rhinological Association, and I will now read it to you as an illustration of modern progress. Under the section, "Causation of Deviations of the Nasal Septum," I find fifteen headings, as follows: (1) Heredity causes. (2) Congenital causes. (3) Syphilitic causes. (4) Rickets. (5) Blowing nose with same hand. (6) Habitual sleeping on one side. (7) Tendency to vertical overgrowths of septum. (8) Primary laws of organization at fault. (9) Action of astringents. (10) Habit of putting finger in nose. (11) Overgrowth of septum. (12) Traumatism (*a*) in utero, (*b*) early, (*c*) recent. (13) Lesions at root, trunk, or terminations of facial nerve (affecting muscles). (14) Unilateral obstructions of nostril. (15) Swellings or growths directly pressing on septum.

If these things are so, our children's children will surely be in a "parlous state." Every mother of a family knows how difficult it is to get children to blow their noses at all, and if it is essential that from infancy we should learn to blow our noses with the right and left hands alternately, I fear few of us will attain unto perfection. If the lecturer had insisted upon the importance of habitually closing one nostril while clearing the other with the whole force of the breath; or if he had pointed out the fact that infants' nostrils can often be cleared by hot spongings; or, if need be, by the nurse blowing the mucus into the pharynx by applying her mouth to the baby's nose, there would have been some practical outcome from his teaching. As it is, I hope that the golden time will be long distant when want of attention, now dignified by the term "aprosexia," in schoolboys and others will be regarded as disease of a physical rather than of a moral nature. But this tendency to magnify slight deviations from the normal into matters of vital importance has its serious aspect. A year or two ago a medical man brought to me a young relative who had undergone treatment by a nose specialist, who had repeatedly drilled an exostosis of the septum, with the result that one morning the drill was broken and remained in the cavity. I made a most careful examination of the nose with a brilliant light, and of the posterior nases with the forefinger, but I failed to discover either the exostosis or the drill, which I advised should be left *in situ*, and no harm eventuated. One can only suppose that the basillar process or body of the sphenoid bone was fortunately thick enough to withstand the vigorous attacks of the operator. But such innocent results do not always follow over activity in the nasal cavities, which, it must be remembered, are separated from the cranium by a very thin cribriform plate of bone. It is not many years since we had to regret the death of a well-known surgeon from meningitis, directly due to extension of mischief from the nasal cavity, which had recently been treated with the electric cautery. The obstruction of the naso-pharynx by adenoid vegetations was, as I have already mentioned, first brought before the profession by Dr. Wilhelm

Meyer, of Copenhagen, in a paper communicated to the Royal Medical and Chirurgical Society by the late Mr. John Marshall in November, 1869. (Medico-Chirurgical Transactions, vol. 53.) [The lecturer then read the abstract of Dr. Meyer's well-known paper on "Granular Pharyngitis."]

The clinical facts here narrated have been abundantly tested by practitioners in all countries, and if the treatment recommended has been slightly modified from time to time, the principles of it remain as laid down by Meyer. As regards diagnosis, the introduction of the forefinger into the naso-pharynx is at once the simplest and best method, and even with children the operator runs no risk of being bitten if he encases his first phalanx in a piece of stout india-rubber tubing. But if it is desired to avoid giving any pain, the employment of the nasal douche, as advised by Semon, will at once determine whether the naso-pharynx is obstructed or not.

As regards treatment, surgeons have for the most part abandoned the use of instruments introduced through the nose, as recommended by Meyer, for the more direct route of the pharynx. Here the nail of the forefinger forms a satisfactory instrument for the removal of small vegetations, but it may be usefully supplemented by Gottstein's curette when the growths are large. The employment of curved cutting forceps introduced behind the palate is to be deprecated, since the operator has to work in the dark, and may unwittingly inflict serious injury upon the pharynx, or come on the Eustachian tubes. The danger of portions of growth or blood getting into the air-passages is best met by employing local anesthesia by cocaine in all but severe cases, and when chloroform is used for these latter, by bringing the patient's head well over the table so that the nose may be the dependent part.

Besides these cases of distinct growth in the naso-pharynx, there are doubtless cases of thickening of the mucous membrane of the nasal cavities due to constitutional causes, but these are really unimportant unless sufficiently severe to cause obstruction. When this is the case they may be beneficially treated with the hot galvanic wire, which, either scored on the surface or thrust into any portion of thickened mucous membrane, produces effects precisely analogous to those witnessed on the surface of the body, when the actual cautery is applied. The contraction brought about by the healing of the scars thus produced, and the bracing up of the tissues thus effected, tends, no doubt, to reduce the thickening of the mucous and sub-mucous tissues, and to bring the parts into a healthier condition.

I would venture to quote here from Dr. McBride's recent work on "Diseases of the Nose, Throat, and Ear," a passage which is particularly valuable as expressing a specialist's reasonable view as to the over-activity frequently displayed in the treatment of slight affections of the nasal mucous membrane.

Dr. McBride says, p. 265: "Rhinology has made rapid strides of late, and operative rhinology has accomplished much for the benefit of humanity. It has, however, added something to the sufferings of mankind. As a student of rhinology for more than a decade, with considerable clinical material at command, I know what the ideal normal nose should be. As an aurist who examines the anterior nares in most cases, I also know full well how far this organ may deviate from health (if a normal nasal mucosa be implied by the use of this term), without occasioning any symptoms referable to this part, I would therefore contend that at present we know as the normal an ideal which is not often met with. Indeed, if the porsons who, in answer to leading questions, state positively that they are not in any way troubled by sympotms referable to the nose, be examined, the probability is that more than half will show such evidence of disease, *e. g.*, spines on the septum, thickening of the mucosa over the turbinate bodies, etc., as would lead to severe operative measures being advised by many rhinologists, if they were to carry out what they advocate. This excessive operative zeal appears to me a great danger, threatening as it does the credit of our profession as a whole, and rhinology in particular. * * * I have dwelt, perhaps, unduly on these points, but the practical outcome I desire to lead up to is this: let no surgeon be induced to operate on the nose simply because there is some degree of hypertrophy of the mucosa, unless the symptoms are sufficiently important to warrant such interference."

The gelatinous polypus of the nose is a good example of myxoma, or mucous tumor, and consists of a delicate fibrous network infiltrated with mucine. The hygrometric properties of nasal polypus are well recognized by patients, who complain that their noses are always "more stuffy" in damp weather. Springing from the superior and middle turbinate bones, the mucous polypus is usually fairly visible from the anterior nares, where it presents a characteristic yellow mass, which readily reflects the light, and this I look upon as its best marked sign. And yet mistakes are made in the diagnosis of polypus, and the commonest, in my experience, is that of taking the convex side of a deviated septum, or the anterior extremity of an hypertrophied inferior turbinated bone for a growth. This last is especially apt to hypertrophy in children with a *nez rétroussé*, and it is well to bear in mind, therefore, that polypus in children is very rare, although, of course, not unknown.

If nasal polypi are fairly obvious from the front, it may, I think, be assumed that larger ones hanging down into the posterior nares are readily recognized. The enormous mass of polypi shown in the preparation before you from the University College Museum, was removed by myself from a man who had well-marked polypi in front, as well as masses behind, so large as to be visible below the soft palate. I removed the growth from behind the palate with curved forceps, and was gratified to find that the entire mass had been brought away, and that the nose was absolutely clear.

For myself, I believe that a properly made and slender polypus forceps, the blades of which are serrated down to the hinge, is the best instrument for removing nasal polypi of any size, as they usually are when first attacked, but in order to effectually clear the nostril, it is essential that the left forefinger should be introduced into the posterior nares, so as to guide the forceps in dealing with the growth placed there, and in this way only can an effectual clearance be brought about. A 20 per cent. solution of cocaine applied both to the anterior and posterior nares (the latter with a bent brush), will do much to make the procedure painless, but the operator should invariably protect his forefinger with a piece of thick india-rubber tubing, since the best disposed patients are apt to close their teeth involuntarily, under the influence of pain. The use of a general anesthetic is, I think, to be deprecated in the removal of nasal polypi, partly because of the difficulty of breathing caused by the obstructed nose, and the necessary introduction of the finger into the mouth, but more especially of the hemorrhage, which is often free, and which may easily find its way into the air passages.

But, however successfully the nostrils may be cleared of large polypi at the first sitting, it is notorious that patients reappear in the course of a few weeks with fresh developments. Nor is this very wonderful when one considers that the tendency of the nasal mucous membrane to hypertrophy is not necessarily remedied by the operation, however successful. You, Mr. President [Mr. Thomas Bryant] recommended years ago the use of snuffs of tannin and sulphate of zinc to produce a more healthy condition, and I have used these and other astringents with advantage; but still one can hardly expect to effect a cure by a single operation. The rational explanation of this fact is, I think, to be found in the shape of the turbinate bones, which have a curved edge and a concave surface looking outwards from the nasal cavity, on which small polypi are apt to develop and eventually to invade the nares. You, sir, have advised the removal of portions of the turbinate bones with scissors in cases of recurrent polypus, and in inveterate cases I do not think a better plan can be pursued. In ordinary cases, however, the common nasal snare of cold steel wire, which has been in common use in Guy's and other general hospitals for years, is the best instrument with which to remove small polypi. If the nose is well cocainized by making the patient sniff up the solution from a brush, or by employing a small spray apparatus, a bivalve speculum can be introduced, and a good reflected light be thrown into the cavity. The small polypi can be seen projecting from the mucous membrane, and can be caught *seriatim* in the noose and then be plucked away with little or no pain or hemorrhage. To make assurance doubly sure the abraded surface may be touched with a solution of nitrate of silver, or with a hot wire. Several operations of the kind, at intervals, may be necessary before a cure is effected.

But, while recognizing the advantages of carefully conducted operation on small polypi, I must enter a protest against the method, too often adopted by the specialist, of making a series of attacks upon large polypi without effectually clearing the nasal cavity. The result is, as I have witnessed, to give rise to great irritation of the nasal cavity, with considerable fever and general malaise, leading to the patient being kept in bed and treated as an invalid quite unnecessarily. If the nostrils are once sufficiently cleared to allow of their being thoroughly irrigated with mild antiseptic solutions, there is no danger of any complication of this kind arising, and the treatment of hemorrhage by hot water douching becomes at once available should it be required.

In connection with polypus nasi, I am obliged to allude to a disease which has been described as of frequent occurrence by Dr. Woakes and by him alone—the so-called necrosing ethmoiditis. According to this author, the disease starts from frequent and prolonged catarrh, sometimes from the exanthemata, sometimes from injuries. At the commencement of the attack, small projecting formations are seen on the middle turbinate bone; these formations become enlarged and lead to dislocation of the bones and deformity of the nose. In this later stage, the existence of bare rough bones is said to be easily ascertained. Still later clearage of the turbinate bones takes place and new polypoid formations are superadded to the other symptoms present. At a meeting of the Medical Society, Dr. Woakes declared that he had never yet examined a case of nasal polypi for necrosis of bone without finding it. A normal middle bone, turbinate bone, was but rarely found.

Now it is very remarkable that no single author whom I have consulted confirms these pathological views or have ever met with the disease in question; but the most recent of all, Zuckerkandl; of Vienna, (Normale und pathologishe Anatomie der Nasenhohle," vol. 2, 1892, p. 120) speaks so forcibly upon the subject that I venture to quote him. He says: "The statement made by E. Woakes cannot be too sharply criticized, on account of the operative conclusions which the author draws from his mistakes; and every medical man may be warned against giving any credence whatever to these statements, which are evolved more out of the inner consciousness of the author than from correct investigation. I have not observed necrosis of the bone in a single case; on the contrary we have seen that the bony parts which exist in the basis of some polypi become elongated and softened."

Polypi occasionally affect the whole of the mucous membrane of the nasal cavities and produce very serious symptoms by invading the antro-frontal sinuses and even the orbits. I show a photograph of an elderly man who was under my care some years ago with this inveterate form of disease, which had distroyed both eye-balls and formed a protrusion from the open frontal-sinus, I gave some relief by freely removing the growths, which were nothing but exaggerated mucous polypi, but they soon sprang up again and the patient's condition proved to be a hopeless one.

Vascular growths present themselves in the nares occasionally, causing more or less obstruction of one nostril only and bleeding freely upon any manipulation. These, if within sight from the anterior nares are, I believe, almost always growths projecting from the antrum, and are either epitheliomatous or sarcomatous in their nature. It has occurred to me on many occasions to see well marked cases of tumor of the upper jaw, which in the early stage were thought to be cases of ordinary nasal polypus, and in which temporary relief had been given by ablation of the growths with polypus-forceps. I would urge upon surgeons the importance of examining microscopically any growth removed from the nose which does not present the ordinary gelatinous appearance of mucous polypus, or the ablation of which was accompanied by unusual hemorrhage, with a view of determining whether it may not be a protrusion of columnar epithelioma or sarcoma from the antrum, requiring a more extensive operation. The results of operation for epithelioma of the upper jaw are so disastrous in their after-history, that it would be of the greatest importance to the patient that the root of the disease should be attacked as early as possible.

Hemorrhage from the nostrils of a more profuse character, recurring at intervals, will probably be due to some form of naso-pharyngeal tumor, though for the most part only fibrous, these tumors are most serious in their development, being generally attached to the base of the skull. They occur for the most part in young persons, and would appear to be in some way connected with the development of the cranial bones. In rare instances actual protrusions from the cranial cavity in the form of meningocele or encephalocele have been mistaken for naso-pharyngeal growths and in more than one case have been attacked by the surgeon with fatal results.

In addition to giving rise to frequent and profuse epistaxis, naso-pharyngeal tumors produce the ordinary symptoms of obstruction of the nasal cavities, accompanied by mucous and occasionally purulent discharge and deafness. A curious symptom which has been observed in many of these cases is drowsiness; the patient sometimes falling asleep even when standing upright. As the tumor enlarges it either encroaches upon the pharynx and thrusts forward the palate, or, growing forward, expands the nose, giving rise to the hideous deformity known as "frog-face," and, by pressure on the lachrymal ducts, causing epiphora.

The prognosis of these naso-pharyngeal growths is always serious, especially in the young subjects, in whom they most commonly occur, but instances are recorded in older patients of spontaneous disappearance by sloughing, one of which occurred to Mr. Birkett, who had occasion to tie the left common carotid on account of the hemorrhage. (*British Medical Journal*, Feb. 13, 1858.)

Operative interference being generally a matter of necessity, on account of the urgent symptoms, the surgeon may be able, if the growth be pedunculated, to deal with it most satisfactorily with the wire ecraseur introduced through the nose. I have thus succeeded in excising a naso-pharyngeal fibroma by means of the forefinger introduced behind the palate, with the best result. The galvanic wire ecraseur may also be employed in the same way, and has the advantage that the hot wire arrests all hemorrhage should the growth prove to be of a vascular and sarcomatous nature.

In order to reach a naso-pharyngeal growth more readily from the mouth, division of the soft, and even of the hard palate, as proposed by Nélaton, has been undertaken. Perhaps the most satisfactory method is Maisonneuve's "palative button-hole," which consists in dividing the greater part of the soft palate to admit the passage of the finger and of instruments, whilst maintaining the integrity of the posterior portion and uvula, so as to permit of easy coaptation of the palate by stitches on the completion of the operation.

In cases where the nasal cavity is already seriously involved, operations from the face may be required, and of these, Rouge's is probably the best and simplest. It consists in detaching the upper lip from the upper jaw, as far as the first molar tooth on each side, by an incision carried through the mucous membrane. When the anterior nasal spine is reached, the cartilaginous part of the septum nasi is detached from it and the nose drawn up so as to get a view into the anterior nares. If necessary, the alæ nasi also may be detached and the nose be carefully turned up on the forehead, when the anterior nares can readily be reached and enlarged, if requisite, to give admission to the cavity. And Professor Annandale has shown that by detaching the whole length of the nasal septum, and then dividing the hard palate with the saw, it is possible to separate the superior maxillæ for an inch, and thus gain more complete access to the naso-pharynx. (*Lancet*, Jan. 26. 1889.) The great advantages of Rouge's operation is the complete absence of external scar.

When only one nostril is involved, the surgeon may prefer to divide the lip in the median line and to carry the incision into the nostril of the affected side, thereby gaining free access; which can be facilitated, if necessary, by prolonging the incision around the alæ nasi and detaching it from the bone. This is, in fact, the first step in the ordinary operation of removal of one superior maxilla, which has been practised on many occasions as a preliminary proceeding in the treatment of naso-pharyngeal polypus.

In order to obviate the deformity consequent upon actual removal of the upper jaw, Langenbeck proposed to resect the upper part only, leaving it attached by the nasal process, which served as a hinge, so that the bone might be turned aside for removal of the polypus and be again replaced. An incision, convex downwards, was carried from the ala of the nose to the malar bone, and back along the zygoma. This was met at the malar bone by a second incision, from the nasal process of the frontal bone along the lower margin of the orbit. Detaching the masseter, the forefinger was passed through the pterygo-maxillary fissure into the spheno-maxillary fossa, both of which had been enlarged by the pressure of the tumor. A keyhole saw introduced along the finger was made to cut horizontally forward, above the level of the palate, as far as the nostril; and the upper incision having been deepened, the soft parts were raised from the floor of the orbit and from the angle between the zygoma and the malar bone. By introducing an elevator into the spheno-maxillary fissure and thence across the floor of the orbit as far as the lachrymal bone. The whole piece was then lifted up, bending upon its attachment to the nasal and frontal bones as upon a hinge, until it was completely turned inwards and upwards over the opposite side of the face.

Huguier and Cheever have each devised a method of temporarily *depressing* the upper jaw so as to reach the naso-pharynx. Both operations consist in a vertical division of the hard palate close to the median line and a horizontal section of the superior maxilla and palate bone from the pterygo-maxillary fossa forwards to the nostril, below the level of the malar bone. On the completion of the operation, the depressed portion is restored to its position and held in place by wire sutures. In one case, Cheever carried out this proceeding on both sides simultaneously, but with fatal result (Med. and Surg. Reports of Boston City Hospital, 1870), but Tiffany subsequently repeated the proceeding with success. (Trans. M. & Chr. Fac., Maryland, Baltimore, 1878.)

Discharges from the nose are of various kinds, the simplest being the ordinary mucus of the nasal cavities, which becomes exaggerated in ordinary nasal catarrh or acute rhinitis. A cold in the head cannot perhaps be strictly called a surgical affection, since it is but a part of the general catarrh, but the pain caused by extension of the inflammation to the frontal sinuses is severe enough occasionally to give rise to unnecessary alarm. In my experience, anything like permanent mischief resulting in the frontal sinuses is extremely rare, and the seat of chronic discharge is more likely to be found elsewhere than in those cavities.

A clear watery discharge from the nostril appears to be often the result of senile changes without actual disease, but cases of profuse watery discharge generally depend upon some polypus affection. Sir James Paget has put on record (Clinical Soc. Trans. xii) a case of polypus of the antrum in which a constant flow of clear watery fluid from the nose was the only symptom. At the *post-mortem* examination, "the floor of the antrum was covered with two broad-based convex polypoid growths, deep, clear yellow, with the fluid infiltrated in their tender tissue, and covered with exceedingly thin, smooth membrane, traversed by branching blood-vessels. They were of rounded shape, about two-thirds of an inch in diameter, and half an inch in depth; they looked like very thin walled cysts, but were formed of very fine membranous or filamentous tissue, infiltrated with serum."

The use of astringent snuffs, and especially the sulphate of zinc, as recommended by Brodie, appears to keep these watery discharges in check, and operative interference would not be justified unless there were unusually good grounds on which to found a diagnosis of polypoid growths in the antrum or elsewhere.

Purulent discharge from the nostrils may result from exaggerated rhinitis or, if chronic, may depend upon the presence of a foreign body. In children especially it is well to examine the nares thoroughly and to use the nasal douche until a full stream is readily passed through the nose in both directions, so as to wash out any possible foreign obstruction, the introduction of which has long been forgotten. Numerous cases of the formation of calcareous masses or rhinoliths by the deposit of saline materials upon foreign bodies are recorded; when met with these must be crushed with suitable forceps and removed with as little damage to the mucous membrane as possible.

The chronic purulent discharge of children, commonly known as ozena, is characterized by an offensive odor, which makes the unfortunate sufferer an outcast from society, though the patient is fortunately insensible to the horrible stench himself, the olfactory sense being entirely abolished. The disease is essentially a fetid atrophic rhinitis, characterized by dilatation of the nasal cavities and widening of the nose, so as to produce in extreme cases the deformity known as "saddle-nose."

The tendency of the purulent discharge is to dry in the cavities of the nose and to produce yellow or greenish crusts, which adhere firmly to the atrophied mucous membrane, and are dislodged with difficulty. This is especially the case on those parts of the mucous membrane which are ulcerated, as they so commonly are, but it may be questioned whether the ulcers are caused by the crusts or *vice versa*. The majority of sufferers from ozena are well marked tubercular or syphilitic subjects, and in the latter the discharge is often kept up by necrosed bone, the presence of which can be detected with the probe through the anterior nares, or by the finger introduced into the naso-pharynx.

The treatment of ozena is necessarily tedious and very unsatisfactory, requiring constant attention on the part of the patient and his friends for long periods. The methodical employment of irrigation, with warm detergent lotions, is the first and most important detail of treatment, and from personal experience I prefer the terebinthinate fluid, known as sanitas, for the purpose. A caution is necessary, however, against the employment of powerful continuous nasal douches, since they are undoubtedly apt to set up mischief in the middle ear. A small nasal douche, with only a tumblerful of water, is the only admissible form of continuous douche, and is safe because it is readily interrupted. But a better plan is for the patient to employ an ordinary Higginson's syringe, so that the muscles of the palate may act only when the impact of the water is made, and thus the Eustachian tube may be closed. The forcible interrupted current has, too, the advantage of more readily dislodging the crusts. After thorough washing, I believe the application of glycerine, in the form of glycerine of borax, with a brush, to be most useful in preventing the reformation of crusts and favoring the healing of ulcers, and this may, in bad cases, be followed up by the application of the glycerine of carbolic acid to both anterior and posterior nares. To obviate the stench which is so prominent a feature of these cases, the use of a snuff of iodol and borax (1:7) has, in my experience, proved satisfactory.

Residence at a bracing sea-side place is certainly advantageous to the cases of ozena dependent upon strumous diathesis, and the sea-water may be advantageously tried as a douche. The administration of cod liver oil, if it can be borne, or of the syrup of the hypophosphites, is also useful. In the cases of ozena dependent on congenital syphilis, it will be well to employ mild mercurial douching and to apply mercurial ointments, or, better, oleates, diluted, to the ulcerated surface. At the same time the iodides of potassium or sodium should be administered internally in full doses. When bone is exposed and necrosed, time must be given for its complete separation before attempts at removal are made, or more harm than good will be done; and in extensive necrosis, it will be justifiable to have recourse to Rouge's operation of turning up the lip and nose from the maxilla in order to get a free opening into the anterior nares.

A chronic discharge, from one nostril, of pus, which is not offensive to others or very slightly so, depends, in the majority of instances, upon empyema of the antrum. This may be caused by the irritation of decayed teeth, the roots of which naturally impinge upon, and in many cases actually involve the floor of the antrum; or, as has been maintained of late by some rhinologists, may be caused by inflammation extending from the nasal mucous membrane. It is very difficult to prove either cause to be the only one, but seeing that in many cases of empyema of the antrum the patient has suffered from his teeth, but has made no complaint of the nose until the discharge made its appearance, the balance of evidence seems to be in favor of the dental origin of the affection. Be that as it may, it is certainly the fact, that only of late years have surgeons recognized that a discharge of pus may be proceeding from the antrum without any of the symptoms of inflammation which have been described as pathognomonic of the affection. As most recent writers upon the subject have drawn their inspiration from John Hunter's description of the "Abscess of the Antrum Maxillare," contained in his essay on diseases of the teeth, I may be permitted to point out that his description refers to the rarer cases in which obstruction of the opening into the nostril has taken place, and not the more ordinary form of purulent nasal discharge. Thus Hunter says, "the antrum maxillare is very subject to inflammation and suppuration in consequence of disease of the neighboring parts, and particularly of the duct leading to the nose being obliterated. Whether this is the cause or only an effect, is not easily determined, but there is great reason to suppose it an attendant, from some of the symptoms. If it be a cause, we may suppose that the natural mucus of these cavities accumulating, irritates and produces inflammation for its own exit, in the same manner as an obstruction to the passage of the tears through the lachrymal duct produces an abscess of the lachrymal sac. This inflammation of the antrum gives a pain which will be at first taken for the toothache, especially if there be a bad tooth on that side; however, in these cases, the nose is more affected than commonly in a toothache. The eye is also affected, and it is very common for people with such a disease to have a severe pain in the forehead, where the frontal sinuses are placed, but still the symptoms are not sufficient to distinguish the disease. Time must disclose the true cause of the pain; for it will commonly continue longer than that which arises from a diseased tooth, and will become more and more severe; after which a redness will be observed on the fore part of the cheek, somewhat higher than the roots of the teeth, and a hardness in the same place, which will be considerably circumscribed. This hardness may be felt rather highly situated on the inside of the lip."

This description of Hunter's has been followed by most systematic writers of the present day, and I must confess to having reproduced it in the second edition of my work on "The Diseases of the Jaws," published in 1872. I gradually became aware, however, of the fact that suppuration of the antrum was not necessarily preceded by any inflammatory symptoms, and I published a paper on the subject in the *Medical Examiner*, of December 21, 1876, from which I will quote a passage: "The more common course of events is that without any acute pain the patient notices that he has a purulent discharge from the nose when blowing it, and perhaps is aware that when lying down the discharge finds its way into the throat. This latter point is often overlooked, however, though there may be a complaint of a very disagreeable taste in the mouth and a tendency to nausea in the morning, with a hawking up of pellets of inspissated pus. With all this there is no distension of the antrum, and it is this fact which frequently misleads the practitioner. Given a patient who complains of a purulent discharge from the nostril, with occasionally a disagreeable smell, and the case is too apt to be put down as one of ozena and treated by nasal douches, snuffs," etc. These views were reproduced in the third edition of my work on the jaws, published in 1884, and also in the course of lectures "On

Certain Diseases of the Jaws," which I had the honor to deliver in this College in 1887. They seem, however, to have attracted little attention. Ziem, Stoerk, and Mikulicz, who wrote upon this subject in 1886 are generally credited with originating the views which I have held and taught for many years. Ziem appears to have himself suffered from empyema of the antrum, and describes his own illness most graphically in his paper. In 1877 he commenced to suffer from a fetid unilateral nasal discharge. Various remedies were applied to the nasal mucous membrane, but these, as well as internal medication and a stay of two years in Egypt, failed to produce any improvement. In 1883 the discharge became so profuse and the stench so marked, that the necessity of giving up his practice became more and more urgent. He now decided to have the antrum opened as the first step in a thorough search for the source of the suppuration. The surgeon whom he requested to perform the operation was very unwilling to undertake it, because none of the recognized signs of empyema were present. When, however, the cavity was opened and washed out, a large quantity of pus came away, and finally a cure was effected. The diagnosis of pus in the antrum is by no means always easy. The method of examination recommended by Fränkel in 1887 is useful and simple. The nose having been thorougly cleansed and it having been ascertained by inspection that the nostril corresponding to the suspected antrum is quite free from secretion, the patient is told to lie down across a chair or on a sofa, supporting himself with both hands on the floor, and holding the head down with the affected side uppermost. After remaining in this position for half a minute, he is to sit up without either blowing his nose or inspiring through it. The speculum having now been reintroduced pus will be seen in greater or lesser quantity in the middle meatus, if the discharge really comes from the antrum.

Attempts to establish the diagnosis of antral empyema by instruments introduced from the nose, either through the natural opening in the middle meatus, or by puncturing the inner wall of the antrum through the inferior meatus, have been made by various surgeons; for my own part I cannot see that the puncture through the socket of a tooth or through the canine fossa above the alveolus is so serious a matter that it can be advisable to resort to more difficult proceedings through the nose; but the question has been largely discussed in German surgical literature, and equally competent authorities are ranged on opposite sides in the controversy. In 1880 Heryng, of Warsaw, proposed to effect the diagnosis of fluid in one antrum by illuminating the bones of the face by an incandescent lamp introduced into the patient's mouth. Mr. Nathaniel Stevenson was good enough to make a series of experiments upon himself and others in my presence to establish the truth of Heryng's statement, that darkness on one side of an illuminated face might be taken as probably symptomatic of empyema. But the conclusion we came to was that the thickness of the bone varies so greatly in different individuals, as Heryng himself has noted, that the test proposed was not very reliable.

Still the symptoms of, usually, one-sided periodical discharge of pus, which is not offensive, or only slightly so, and which is apt to flow, when the patient is recumbent with the affected side uppermost ought to direct the surgeons attention to the antrum, for that empyema of the antrum is much more common than usually supposed, cannot be doubted. I am surprised to find a well-known rhinologist stating his opinion to the contrary, and maintaining that diseases of the antrum are rare, but then possibly they have been overlooked. Some years back, I was consulted by a lady who had been under the care of this gentleman for some months for a chronic discharge from the nostril, for which she had undergone one scraping operation without benefit. The discharge continuing, it was suggested that the frontal sinus must be the seat of the disease, and it was proposed to trephine the sinus with a view of clearing up the question. As the patient was both young and good looking, her friends, not unnaturally, took alarm at such a serious proposal as opening up the frontal sinus, and I was consulted. I came to the conclusion that in all probability the antrum contained pus, and I advised that a puncture should be made into it before any more serious operation should be undertaken. This was accordingly done, a quantity of offensive pus was washed out, and the patient rapidly regained her health.

Whether the puncture should be made through the alveolus or through the canine fossa must, in my opinion, be guided by circumstance. When a carious molar tooth is present, it had better be extracted, and a puncture made through one of the outer sockets; but if there is no tooth requiring extraction, I prefer to puncture above the alveolus in the canine region, and I have seen no harm follow the proceeding. Which ever method is employed, the thorough washing out of the cavity forms an essential part of the treatment, and this can readily be effected through an ordinary Eustachian catheter, fitted with an india rubber syringe. Whether a permanent silver tube should be fitted by a dentist, and secured by a plate to the neighboring teeth, must depend very much upon the patient. If he can introduce the Eustachian catheter readily and wash out the cavity easily, there is no occasion for a tube, but if, as oftens happens, the opening through the alveolus tends to close, and the patient is constantly in difficulties, then it is better, I think, to have a tube fitted, care being taken that it is only just long enough to reach the floor of the antrum and not to go beyond it. This can be fitted with a plug to prevent the accidental passage of food into the cavity.

Within the last few years, a new importance has been given to nasal disorders by the reputed discovery that many obscure nervous affections are nasal reflexes, or dependent upon some abnormality of the nasal cavity. That some forms of asthma, and particularly the so-called hay-asthma, have depended upon irritation of the nasal mucous membrane, has long been known; but it is only since Hack's paper in 1882, that various and distant phenomena have been connected with the nose. Hack makes these nasal reflexes cover a sufficiently large field, namely: gastralgia and dyspepsia, cardiac palpitation, salivation, neuralgia of the trigeminus, cephalalgia, migraine, scotoma, ciliary neuralgia, photophobia, vertigo and agoraphobia; while his followers give examples of epilepsy, neurasthenia, and nocturnal incontinence! Even exophthalmic goitre has been thought to be connected with nasal obstruction, and Prof. Hack considered this obscure disease to be a reflex phenomena, due to "permanent irritation of certain peripheral terminal apparatus of the sympathetic nerve which are expanded in the erectile tissues of the nose."

It must, however, in fairness be stated, that amongst specialists themselves there has been, from the time when Hack's doctrines were promulgated, considerable skepticism concerning the wide-spread influence attributed by him and his followers to nasal affections. That nasal operations are not always so beneficial as stated, or are even altogether harmless in their results, is conclusively shown by a case reported by Dr. Felix Semon (Clinical Soc. Trans., vol. 22), in which he distinctly traces the development of exophthalmic goitre to interference with the nose for the removal of nasal polypi. It is not for me to decide between two such authorities, as to cause and effect.

And now, sir, I have completed my task. I have endeavored to sketch the principal diseases of the nasal cavity as they present themselves to the surgeon, and have made some reference to what I believe to be the injudicious activity of the specialist. I trust that I have not "set down aught in malice," but I felt that it was due to the position I have the honor to occupy in this College, that a plain word should be said from this chair on a subject of daily increasing importance.

THE TREATMENT OF INCOMPLETE ABORTION.

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Read before the San Francisco Gynecological Society.

By incomplete abortion is meant that condition in which the fetus is expelled during the early months of pregnancy, while the fetal envelopes, and immature placenta, in whole or in part, are retained within the uterus. Such a condition is not at all uncommon. The abortion throughout may have been under the care of a medical attendant, who has watched its progress and made every effort to check or to guide its course; and yet at last the fetus alone comes away, leaving its appendages behind. Or it may be that the medical attendant does not see the case at all, until after the expulsion of a mass, which proves, on examination, to be only a part of what the uterus is known to have contained.

Where the process of abortion has thus obviously been incomplete, what is to be done? This question must present itself forcibly to every practitioner, as a grave problem, full of anxiety and doubt. He holds in his hand a minute fetus, from the umbilicus of which dangles a delicate cord, two or three inches in length. He knows that the other end of that cord is inside the uterus, attached to its wall where the placenta was being formed. What is his duty in the matter? Shall he follow the other end of the cord at once to its termination, and forcibly remove the remnants to which it leads? Or shall he wait for nature to do the work without assistance from him? It is the object of this paper to briefly consider the proposed modes of procedure in such cases, and to state the plan that seems most advisable to the writer.

Suppose that the medical attendant decides not to interfere with an incomplete abortion, but to let matters take their course. He will not lack authority for this plan, for such is the advice of many of the prominent teachers of obstetrics. Leishman[1] suggests delay, and does not approve of interference except in cases of "profuse and repeated hemorrhage, fetid discharges, and febrile symptoms." Tarnier[2] speaks strongly in favor of allowing the uterus time to expel the secundines.

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[1] System of Midwifery, 1879, p. 372.

[2] Cazeaux and Tarnier, Theory and Practice of Obst., p. 583.

And Winckel[3] is said not to attempt active interference in such cases. These men justify their conservatism on the ground that gradual separation of placenta and membranes will in time take place spontaneously, and that the uterus will then contract to expel them. Or if they do not follow the fetus immediately, it is either because they are firmly attached to the uterine wall and a living part of it, or because the cervix has contracted too firmly to allow of their expulsion—either condition contraindicating active measures for their removal, because violence is apt to be done to the uterus in the process.

There are two great dangers in this conservatism: hemorrhage, either immediate or secondary, and sepsis. The bleeding that always follows separation of placenta and membranes from the uterus is checked only by firm contractions of the muscular wall. If these contractions are hindered by retention of a mass, that acts as a foreign body keeping the walls apart, hemorrhage is very apt to continue until the mass is removed. If checked temporarily, it is apt to recur from time to time, as successive portions of the mass undergo separation, with rupture of vessels that connected them with the uterus. Again, the retained secundines offer a fertile field for the growth and development of the germs of decomposition, and so their presence is a constant menace of septic infection. These two dangers, hemorrhage and sepsis, are recognized by the advocates of conservatism, who counsel active measures in case bleeding becomes continuous or uncontrollable, or the vaginal discharge offensive and temperature high.

Why should the patient be subjected to these dangers at all? Why should she be allowed to go on losing blood, or to run the risk of blood poisoning from absorption of decomposing tissue, when the bleeding can be prevented and the possibility of decomposition within the uterus can be excluded? These are the questions asked by those in the profession who advocate immediate and radical treatment in incomplete abortion. Such men are headed, in the United States, by Paul F. Mundé, whose opinion on obstetrical matters must always command the highest respect. He says:[4] "The future safety of the patient demands that the secundines should be at once removed after the expulsion of the fetus, in every case in which such removal can be accomplished without force sufficient to injure the woman." In Germany, the plan of thorough and immediate cleaning out of the uterine cavity following incomplete abortion has been strongly advocated by Dührssen, of Berlin, who reported in the *Archiv. f. Gynäkologie* 150 cases treated in that way, with but two deaths, neither of which, he says, was in any manner attributable to the treatment adopted.

Such treatment certainly does away with the dangers involved in the conservative method. Thorough emptying of the uterus puts an immediate stop to the hemorrhage, and it removes the probability of septic infection. Its only danger lies in a lack of care on the part of the operator, who may be too violent in his work. It is possible to penetrate a congested and softened uterus, in the act of removing its contents; or to tear away its own tissue, in the effort to remove adherent particles. But these dangers should not be counted against the operation itself so much, as against the skill of the operator. Immediate removal of retained membranes or placenta certainly seems the proper course to pursue in the treatment of incomplete abortion. I wish to call attention to several cases bearing upon this subject, a brief account of which will best serve to enforce the principles and details of the plan to be pursued.

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[3] Hirst. Am. Syst. of Obst., Vol. I, p. 319.

[4] American Journal of Obstetrics, Feb., 1883.

A lady in the fourth month of her pregnancy, who had been frightened at the unexpected appearance of a mouse, was seized soon after with hemorrhage and cramps, and in due time a fetus, about 4 inches in length, was expelled. Its delicate umbilical cord was broken off about 3 inches from the fetal abdomen, and the other end could be felt on vaginal examination, leading through the external os into the cavity of the uterus. Pressure over the fundus, combined with moderate traction on the cord, failed to dislodge the remaining contents. The os was too much contracted to admit the introduction of the finger, but a considerable discharge of bright red blood was going on all the time. Conservative treatment was adopted to the extent of packing the vagina thoroughly with cotton, in the hope that thus the hemorrhage might be checked and the separation of placenta and membranes hastened. Returning four hours later, I found that sufficient hemorrhage had taken place, in spite of the tampon, to thoroughly saturate the cotton and soak through to the vulva. The patient was then put upon the table, in Sims' position, the cotton removed, and with curette forceps and dull curette, the uterus was thoroughly cleaned out. At the beginning of the operation, the hemorrhage was so profuse that the cervix was constantly hidden by a lake of blood, which formed more rapidly than it could be mopped away, and seriously interfered with the work. Yet this bleeding ceased almost instantly after the forcible removal of the adherent placenta and membranes, and never afterwards amounted to more than a bloody tinge in the lochial discharge. The uterus was not washed out, nor any application made to its cavity following the curetting; but a vaginal douche of corrosive sublimate, 1:2000, was given at once, and twice a day for a week afterwards. The only medicine given was a preparation of iron, to repair the blood-loss. The temperature never rose above 100° F., nor did any symptoms intervene to retard convalescence.

In another case I had induced abortion at the end of the third month, because in three previous experiences the woman had escaped through her labors alive, only by the sacrifice of her child by craniotomy. After due consultation with one of her previous medical attendants, who had twice seen her in labor, and who agreed with me that the conditions justified interference with this pregnancy, I brought on an abortion by introducing a flexible bougie, followed by a Barnes' bag. The fetus came away in 24 hours' time, but the secundines were left behind. Within an hour after its escape, I proceeded to thoroughly curette the uterus and remove the remnants of the abortion. Absolutely no symptoms followed and the patient was eager to be up and about the next day. She disobeyed positive orders, however, by getting up and attending to her household duties on the fourth day following the abortion, thus causing a subinvolution, for which local treatment had to be employed later on.

A third case shows, on the other hand, what may occur from a let-alone treatment. This case I was asked to see by Dr. D. M. Harvey. He had been called to attend the young woman for a constant flow of blood from the vagina, that had been in progress two weeks. Previous to its beginning, she had gone nearly two months without menstruating. Then she took some pills recommended by a lady friend, to "make her regular," with the effect of starting a bloody discharge that had continued ever since; but no ~~physician had been~~ called until she became so weak from loss of blood that she was no longer able to be about. Dr. Harvey had readily diagnosed an incomplete abortion as the cause of the hemorrhage. We found the pulse 140, temperature 102° F., and the patient very pale and weak. On vaginal examination the uterus was much enlarged, soft, and flabby to the touch. The vagina was full of clotted blood. We agreed that *curettement* was distinctly indicated, and proceeded at once to clean out the uterus. It contained a considerable amount of retained membranes and embryonic placental tissue, some of it quite adherent to the walls. This was all removed with curette and curette forceps, and the uterine cavity washed out with a 2 per cent. carbolic acid solution. The hemorrhage ceased immediately and never returned. Free administration of tincture of chloride of iron, with whiskey, and good food, soon brought the pulse down to its normal rate. The temperature fell to normal the day following the curetting, and the patient had no further trouble.

One other case, allowed through the ignorance of the patient to go unattended in the beginning, shows plainly the second great danger of a let-alone treatment in incomplete abortion—that of sepsis. After the usual symptoms of hemorrhage and pain, this woman had expelled a fetus, but no physician was called to attend her until the expiration of a week. Then she was convinced by fever, headache, general malaise, and a horribly offensive discharge from the vagina, that something was wrong. I found the pulse 120, temperature 103° F., the uterus markedly enlarged and sensitive to the touch, and a purulent vaginal discharge that scented the whole house. After a vaginal douche of corrosive sublimate, 1:2000, I scraped from the uterus chunks of rotten tissue with an almost intolerable odor. When these were all thoroughly removed, the uterine cavity was douched with a 2 per cent. carbolic acid solution, and then painted with the compound tincture of iodine. It was remarkable that with such decomposition going on within the uterus, the systemic infection had not been greater; but after clearing out the cavity, the patient quickly rallied, under the influence of a mixture of iron, quinine, and strychnine, with copious use of whiskey and scrupulous attention to cleanliness of the genitalia.

These cases demonstrate that immediate *curettement* following incomplete abortion can be done with the best results; and also that its omission may cause serious trouble. At the same time there is no intention to dispute the fact that cases of incomplete abortion do go on to recovery without interference and without resulting complications. Such cases justify the conservative element of the profession in adopting a *laissez-faire* policy. The views, however, on this subject, of Mundé and his followers, seem the wiser, and I do not hesitate to advocate them and to adopt them in practice.

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HIP-JOINT DISEASE, ITS NATURE AND TREATMENT.

By O. STANSBURY, M. D. Chico, Cal.

Read before the California Northern District Medical Society.

In selecting a subject from the extensive field of surgery by which I might hope to entertain you for a few moments, it occurred to me that a brief consideration of hip-joint disease, its nature, diagnosis and treatment, is well worthy of our consideration.

When we consider the frequency of its occurrence, the disastrous nature of its tendency, should the disease not be recognized in its incipiency, and, recognized, improperly treated, makes this affection both important and interesting to the general practitioner of medicine.

I do not propose to present anything original, but trust a review of that which seems generally accepted to be the nature of the disease, and the best known means of combatting it (which frequently in the hands of the most skilful results disastrously), will best carry out the objects and aims of this paper.

We find, in consulting various authors regarding the nature of the disease, that it is described as follows by Charles Poore:[1] "Hip-joint disease, in the natural sense of the term, means no special complaint, but for years has been applied to a chronic tubercular affection of that articulation very commonly met with in children. It has been called chronic articular arthritis, morbus coxarius, tubercular disease of the hip, coxalgia, etc., but by whatever name it is called it consists of a tubercular inflammation of the hip joint."

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[1] Cyclopedia, Diseases of Children.

Wyeth says: "The disease may begin as a simple idiopathic or traumatic synovitis, the destruction of the bone being secondary, and commencing from the articular surface extending inwards. It may commence as a result of injury to, or arrest of nutrition in the digital fossa of the acetabulum and the destruction of the ligamentum teres. Again, the original osteitis may be situated in the bones which form the cotyloid cavity. Lastly, hip-joint disease may, in rarer instances, result from a peri-articular inflammation; first, a syndesmitis; second, synovitis, and lastly, arthritis."

The stages of the disease have usually been divided into three. In the first stage we have flexion with some pain and lameness. In the second, abduction of thigh with rotation outwards, also lameness. In the third stage, shortening of the neck, destruction of the ligamentum teres, rupture of the capsule, with luxation and formation of pus.

In the first stage the most prominent sympton is pain either in or about the joint, also at the knee, which is accounted for in various ways, but the most plausible explanation seems to be pressure on the obturator nerve, which has branch distributions at both articulations. The pain seems to increase at night and may, in young children, be attributed to growing pains. Should the pain in the hip and knee be accompanied with lameness, it is well to make a thorough examination of the joint.

In the second stage we find a condition of abduction, rotation of the thigh outwards, or eversion of the foot. If the patient stand erect, the weight being brought on the sound limb, the gluteo-femoral fold is partially or wholly obliterated, in walking there is a perceptible limp, and with the contraction of a certain set of muscles (iliacus, psoas and adductor), flexion of the thigh on the hip. In this stage we may have apparent lengthening of the diseased limb.

In the third stage the flexion of the thigh towards the abdomen is more pronounced, adduction has taken the place of abduction, and usually, in standing, the great toe or inner surface of the tarsus resting on the dorsum of the well foot or against the tibia, there may be in this stage apparent or real shortening of the diseased limb. This shortening is ascertained by measuring from the anterior superior spine of the ilium to the inner malleolus, and varies from one to several inches.

As to the differential diagnosis of the disease from other affections that are met with in the hip-joint, I must refer you to any text-book on surgery. To enter into detail would consume more time than is here permissible. I will, however, mention that one of the most reliable tests for the existence of the disease is that given by Sayre. If the patient is stripped and laid flat on the back on a hard, level surface, and both legs drawn up, it will be seen that the sacrum, spinous processes of the vertebræ, the scapulæ and occiput, rest in contact with the table. If the sound limb be extended so that the popliteal space rests against the table, the lumbar spine is very little, if any, raised from the table. If rigidity of the psoas, iliacus and adductor muscles on the diseased side exists, when the diseased limb is brought down with the popliteal space, resting on the table, the lumbar vertebræ will be found arching upwards, leaving a space varying from one to three inches.

Another test suggested by Prof. Ashurst, by which he claims that it is possible to determine the stage of the disease, is as follows: Place the patient upon the table, face downwards; it will then be noticed, if hip-joint disease exists, that the gluteo-femoral crease has almost disappeared on the diseased side, while on the other there are two well-marked creases. This absence of the gluteo-femoral crease is an important sign in hip disease. If the line between the buttocks or rima natium inclines from the affected side, instead of being in the median line, its upper extremity inclining to the sound side, it is an indication of the second stage of the disease. In the third stage, the upper extremity of the rima natium goes toward the affected side. In the second stage you have flattening of the buttock, disappearance of the gluteo-femoral crease, and pointing of the rima natium toward the sound side. In the third stage there is abnormal prominence of the buttock and trochanter, and increased depth of the gluteo-femoral crease, which sometimes becomes so deep that ulceration may occur and is, in fat children, a very troublesome complication, the rima natium points to the affected side. The explanation of these various signs is to be found in the fact that in the second stage the limb is abducted, in the third stage adducted. In the first stage the only deformity is flexion.

There is a condition existing in the second stage of the disease that I have already referred to, called apparent lengthening, which admits of a very simple solution, and in describing it I cannot do better than use the language of Marsh: "As the patient cannot use the limb for progression when it is either flexed or abducted, or flexed and adducted, he adopts certain compensatory positions, which enable him to move about. Having lost the power, from stiffness of the hip, of moving the femur on the pelvis, he now moves the femur and pelvis together; by curving the lumbar spine forward (lordosis) he turns the pelvis on its transverse horizontal axis, so that the knee points downward. To compensate for abduction he draws up the sound side of the pelvis and thus depresses the affected side, with the result of bringing the femur inwards toward the middle line. This movement, attended with curvature of the lumbar spine towards the diseased side, has, by lowering that side of the pelvis, the incidental effect of producing apparent lengthening of the affected limb. If the limb is adducted the reverse occurs, the patient draws up the pelvis on the affected side, and so wheels the limb outward. This movement, attended with curvature of the lumbar spine, with its concavity towards the diseased side, and incidental apparent shortening. This apparent lengthening is invariably the equivalent of abduction, and apparent shortening of adduction."

The treatment of hip-joint disease may be divided into mechanical, constitutional, and operative, and it is to the former of these I desire to invite your special attention. Mechanical treatment consists in placing the diseased limb in such a position that we can give the joint complete rest. This is accomplished in different ways, and should be varied to suit the exigencies in each case. I do not think we should confine ourselves to any one plan.

One method consists in applying a plaster bandage so as to include both knees, the hip joints, and extending above the umbilicus. The patient is furnished with crutches and encouraged to move about. This dressing is kept on some two or three months, is then removed, and if everything seems favorable is left off; if not, it is reapplied.

To my mind, the best method of treating these cases is by extension and the Hamilton long splint (if necessary to immobilize the joint); that is, in the majority of cases. This is accomplished by Buck's extension apparatus and a weight, varying to suit the case, from 3 to 7 pounds being usually sufficient in young children. With this arrangement and the Hamilton long splint, we have a very simple and efficient appliance. Extension is maintained day and night, so long as the patient seems benefited, or until the disease has been arrested. It may be for two months, it may be for twelve.

A case like the following often presents itself: A child has been suffering for some months with pain in the hip and knee joints, which has been diagnosed as rheumatism. This frequently occurs if you are not familiar with the diagnostic signs of the disease. These pains are so severe at night as to seriously interfere with sleep. The patient is pale and anemic, features pinched, and everything indicating the system to be completely run down. He has perhaps just returned from "Dr." Ah Sin, Won Lung, or some other celestial, who has some magical way of treating "all the ills that flesh is heir to." The doctor has applied his *red plaster*, which has various powers, from drawing a dislocated hip back into position to dislodging a tenia solium from its abiding place, no matter what the length of the alimentary canal. Ah Sin has advised walking all the time, "you be all rightee by and by."

Now you can well imagine the result: the patient has gone from bad to worse, until finally the parents become disgusted, though my experience is, it takes a great deal to disgust the average white man with these celestial frauds. Or perhaps they are not disgusted, but their money has been exhausted, and their friend, the Chinaman, has advised them to go home and return at some future time.

Your diagnosis of the case is hip disease in the third stage without suppuration. The first thing that will occur to you, particularly if you have had little or no experience with the disease, is, it will not do to put this child to bed in such condition, deprive him of fresh air and out-door exercise. What, you inquire, is best to be done with such a case? I would say, put him to bed, apply extension, give good nourishing food, some reconstructive tonic, as syr. hypophos. comp. (Fellows'), have the hip joint rubbed daily with ung. iodidi comp., and unless there is actual breaking down of the bone tissue, with the formation of pus in the joint, you may expect to see magical results. The extension will relieve the pain, in a large number of cases, which has been so distressing a symptom. After ten days or two weeks, which time is usually required for the patient to become accustomed to the new order of things, you will see marked improvement. The appetite improves, the weight increases, and there is a general cheerfulness that is hard to realize.

Now what have we accomplished in this, the first part of our treatment? Rest, which is so essential to the treatment of any joint disease. By extension we have lessened, if not removed, the intra-articular pressure of the diseased surfaces upon each other. The rest has improved the general well-being of the patient, by relieving pain, and with the reconstructive tonics we are getting the system in a condition to repair the damage already done, by inunctions of the ung. iodidi comp., we hasten the absorption of any pathological exudates that may have taken place. You will see your patient improve from day to day, and with this improvement will come to you the satisfaction of feeling that you are not an entirely useless commodity in the community in which you live.

After confinement in bed for some three, four or more months, as the case may demand, we wish to get our patient out of bed and give him the benefit of fresh air and out-door exercise. I have used in these cases the long hip-splint of Taylor, and the New York Polyclinic splint. The method of applying these splints can be found in most text-books on surgery. I would especially invite your attention to the Polyclinic splint. It has cheapness to recommend it, which is quite an object with some of these cases, and in most cases I prefer it to that of Taylor. You will see by examination that it cannot be lengthened and shortened at will, as the Taylor splint, but being forged heavy at the lower extremity it would be an easy matter to lengthen it if so desired.

In taking measurements for this brace it is made two inches longer than the sound limb, measuring around the pelvis about an inch below the crests of the ilium.

In applying it, we make use of the same extension strips as in the Taylor splint, having the shoe on the sound limb built-up two inches higher than the other, so as to leave the two about equal length. You will thus have no weight on the diseased limb, the perineal bands supporting the upper end of the splint, and the two inches over the length of the limb protects it effectually from any weight or jar in walking. It is perfectly astonishing to one who has never seen it, with what ease and rapidity these little tots can get around with this brace.

As to operative interference, I will say but little. There are cases that can only be controlled by it. My opinion is that we should give rest and extension a thorough trial before resorting to operative interference.

THE PREPARATION OF PATHOLOGICAL SPECIMENS FOR TRANSPORTATION.

By ALBERT ABRAMS, M. D., Adjunct to the Chair of Clinical Medicine, Cooper Medical College; Pathologist City and County Hospital, San Francisco, Cal.

It is presumed that the general practitioner is unacquainted with the *technique* of bacteriological and pathological investigations, and for this reason many specimens are submitted to the pathologist for examination and diagnosis. It is in the preparation for transportation of these specimens, solids and fluids, that many errors arise, and to obviate them is the purpose of this article.

Tumors and Solid Tissues.—When tumors are extirpated, large pieces should be sent to the pathologist in order that the latter may select typical portions of the neoplasm for examination. Retrogressive changes in tumors are frequent, and destroy the characteristic architecture of the growth. To one unacquainted with the microscopical appearances of new growths, the degenerated portions of the tumor may be transmitted for examination. Sections of tumors or organs should, when possible, embrace the healthy adjacent tissue; and they should at once be placed in the preservative fluid. The choice of the latter is dictated by the nature of the tissue, its bulk, and the time allowed for examination. The following fluids are most commonly employed: (1) Absolute alcohol. (2) Müller's fluid. (3) Methylated spirit. Absolute alcohol is indicated when small pieces of tissue must be rapidly hardened, immersion for 24 hours usually sufficing. It produces unequal shrinking and consequent deformity of the tissues, and is therefore contraindicated in the preservation of delicate structures. It also dissolves the fat of the tissue and for this reason is not employed for the preservation of nervous structures and tissues which have undergone fatty change. Müller's fluid consists of:

Bichromate of Potash	2 parts.
Sulphate of Soda	1 part.
Water	100 parts.

This fluid possesses the following advantages: Cheapness; it does not cause shrinking of delicate structures; it does not overharden; it does not dissolve fatty matter. The following are its disadvantages. Slowness of action (many weeks being necessary for hardening); it changes the color of the tissue; it dissolves calcareous deposits. Müller's fluid is indicated in the preservation of nerve structures and many tumors. It is used as follows: The specimen is placed in vessels containing at least ten times its weight of Müller's fluid, which must be changed at the end of 24 hours and again at intervals of a week until the sixth week. When hardened, the specimens are washed in water and then preserved in methylated spirit. Methylated spirit may be substituted for absolute alcohol when time is no object, the specimens requiring about two weeks for hardening. When specimens are to be examined immediately, sections are made by freezing. In this case, the specimens must be sent in Müller's fluid. When sections of the tumor cannot be removed for examination, then the elements furnished by aspiration with a properly constructed aseptic syringe, may be of some aid in diagnosis. The material thus obtained is placed between two cover glasses and allowed to dry after separation of the glasses. An accurate clinical history of the case should accompany every specimen submitted.

Sputum.—When sputum is sent for examination, about two ounces, if obtainable, are placed in a new and absolutely clean bottle. The latter may be attained by what is called "firing." This consists in washing the wide-mouthed bottle with alcohol and setting fire to the alcohol remaining in the bottle. Under no circumstance is alcohol to be added to the sputum for purposes of preservation, but the addition of a grain of thymol to prevent the development of microörganisms is permissible. The sputum expectorated in the morning is preferred when tubercle bacilli are to be sought for. Before expectorating in the bottle, the patient is instructed to wash the mouth thoroughly in order to avoid contamination with extraneous matters. The absence of tubercle bacilli in the sputum after one examination only, proves nothing, many examinations being necessary before tuberculosis of the respiratory tract can be excluded. When search is to be made for the elastic fibres, it is advisable to send the whole of the expectoration collected during 24 hours. Some antiseptic, like, thymol must then be added to the sputa, otherwise they will be dissolved by the formation of a ferment.

Contents of the Stomach.—While the examination of this is not strictly embraced under the caption of microscopy, specimens are often sent to the pathologist. The artificial removal of the stomach contents is the only certain means of determining the character of the gastric secretion and the degree of digestion. The contents of the stomach are obtained, after eating an experimental meal, by the introduction of a soft rubber tube. Patients often show a decided aversion to the tube, in which case the less certain and practicable method of inducing vomiting may be employed. The best time for obtaining the contents of the stomach is about five hours after consuming a meal composed of 150 to 250 grammes of beef-steak, 50 grammes of bread and a glass of water. If the patient consumes a meal composed of a roll and a cup of tea, the stomach contents may be removed after three-quarters of an hour. Under no circumstance is the gastric fluid to be mixed with water.

Urine.—The quantity passed in 24 hours must be collected and the amount noted. A certain quantity of this should be sent for examination. In some cases, the urine passed during the day and night must be kept separately. It is placed in "fired" bottles, with new corks. In women, in order to avoid contamination with the vaginal and uterine secretions, and the menstrual fluid, it is advisable to draw off the urine with the catheter. If this is impossible, the parts must be thoroughly washed before the urine is voided. The addition of a grain of thymol to the urine to prevent fermentation is permissible. When there is an urethral secretion the first few ounces of urine must be kept in a separate vessel. When urine is to be examined for casts or other organic sediments, it is allowed to stand for a day in a clean, sealed vessel, surrounded by ice. When a sediment has formed, the supernatant fluid is poured off and the sediment is sent for examination, after the addition of a granule of thymol. If the urine can be sent iced, it is to be preferred, with the precaution that the bottle be filled completely to avoid destroying the organic constituents by agitation. An accurate clinical history should accompany the sample.

Feces.—This may be sent after the addition of some antiseptic. When some special portion is to be examined, it is shaken up with many times its bulk of a 30 per cent. solution of alcohol.

Blood.—After providing clean cover glasses, cleanse the finger thoroughly and, with a needle or lancet, make a wound sufficiently large to admit of the exit of a drop of blood without pressure; place the drop between two cover glasses and spread it out in a thin film; next separate the cover glasses and expose to the air until thoroughly dry. The cover glasses thus prepared may be sent securely packed.

Bacteria.—When present in fluids, may be prepared in the same manner as blood.

Semen.—This may be collected in a *condom* at the time of the sexual act.

435 Geary street.

MEMORANDA.

Hydrogen Dioxide in Morbus Coxæ.

I have recently had under my care a case of hip-joint disease, which has been arrested, if not cured, by injections of a solution of peroxide of hydrogen (Marchand's). Similar cases may have been recorded, but they have escaped my observation. The transition from mastoiditis and allied diseases, after incision, to an open wound of the hip joint is easy, and naturally suggests similarity of treatment. Furthermore, in this class of cases the dioxide especially commends itself because it is the most potent of all non-poisonous germicides, and yields to but few if any of the poisonous ones in efficacy. Even in the absence of a sinus communicating with the joint, it is possible with an aspirator to introduce a 10 or 15 volume solution into the cavity, breaking up the pus cells, disintegrating necrosed bone and preparing them for absorption or evacuation. The solvent and disintegrating action of the dioxide may be readily demonstrated by dropping a bit of dead bone into a solution of it. If, then, by the employment of a harmless remedy in such cases we can prevent sepsis, and in a few weeks bring about resolution, even with ankylosis, it is a desirable consummation. It will do away with many of the surgical procedures, while it alleviates the sufferings of the patient. By way of postscript, let me add, I yet hope to hear of pyo-salpingitis being relieved by some such means. In most of these cases the uterine orifices of the Fallopian tubes are dilated as well as patulous, and with a proper syringe, guided, if need be, by an incandescent lamp, the operation would seem to be feasible. C. M. Fenn, M. A., M. D.

San Diego, Cal.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By Wallace A. Briggs, M. D., Sacramento, Cal., and

Henry Gibbons, Jr., M.D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Antiseptic Intrauterine Injections After Labor.—In grave uterine hemorrhage, in puerperal infection, in retained placenta, the beneficial action of intrauterine injections has been abundantly demonstrated, but their usefulness in normal labor is more than doubtful, and it is probable that grave accidents sometimes result from their administration. Three objects are supposed to be obtained by their use: (1) To remove blood clots and placental remains from the uterus. (2) To excite uterine contraction and reduce hemorrhage to a minimum. (3) To impregnate the uterine surface with a germicide solution, and thus prevent puerperal infection. Supposing the placenta to be completely expelled, as happens in most cases, there remains in the cavity of the organ, only blood more or less coagulated, of which the excess is soon gotten rid of by the physiological contractions of the uterus. Should the remainder then be brought away? Does not the newly formed clot obstruct the uterine sinuses, constitute a barrier to ulterior hemmorrhage, play the part of an aseptic eschar, of a hemostatic tampon, much better than one of artificial construction? The cavity full of blood and the cervix obstructed are the conditions most likely to prevent relaxation of the uterine walls, and blood clots are the first expression of the reaction of the system against further loss. The rapid new formation of all tissues is dependent upon the presence at the point of lesion of a plastic substance like blood and lymph, forming the basis of tissue renewal. The sanguineous coagulated mass serves as an aseptic intrauterine dressing, and if the physician, by his hands or his instruments, has not introduced infection, it would not seem justifiable, under a pretext of prophylaxis, to destroy the physiological conditions of reparation, when they are established within normal limits. In order that an injection may produce contraction of the uterine muscle, it must be given with energy, at a temperature markedly above or below that of the body (40° or 0° C.), and when given in this manner syncope is a not infrequent result. In most cases the uterus contracts spontaneously, and should there be a tendency to inertia, friction of the abdomen is generally effectual. It would, therefore, seem unnecessary to resort to a method not without danger, when the same object may be attained in a safe and easy manner. Admitting that the uterus is to be considered as an ordinary wound in the arm or thigh, and treated accordingly, it is now believed that antiseptic solutions should be avoided in uninfected wounds, because they destroy the superficial histologic elements, rendering the tissue more liable to ulterior infection, and the numerous cases of syncope have shown that it is especially dangerous to use powerful antiseptic solutions in the uterus. An intrauterine injection, then, under pretence of prophylaxis, may prevent physiological hemostasis, may destroy an element which opposes relaxation of the uterine walls, may diminish the vital resistance of the wounded tissues, may introduce either air, an element that may be infectious, or pathogenic germs, by means of the hand, sound or liquid itself, in spite of the greatest precautions, and it cannot be denied that abstention from all treatment is more aseptic than a method which involves such dangers.—*Journal de Médicine de Paris*, September 18, 1892.

Ichthyol in Gynecology.—DR. POLARD, after an experience of over a year, with more than a thousand cases, reaches the following conclusions: (1) Ichthyol is the most potent analgesic known in modern gynecology. (2) Ichthyol in the exudative form has a solvent activity stronger and more marked when it is used near the beginning of the malady. (3) Ichthyol, considered in its double aspect as resolvent and analgesic, is the most important addition to modern gynecological therapeutics.—*Annali di Ostetricia e Ginecologia*, August, 1892.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.,

J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and

G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Lipoma in a Young Child.—DR. A. E. VAUGHN reports the case of a child two years old who was essentially rickety, and had a large swelling on the back. The tumor, which had been gradually increasing in size for upwards of a year, and had latterly taken on rapid growth, was situated a little below the angle of the left scapula, almost in the median line; in fact, slightly overlapping the spine, about the size and shape of half a cocoanut, not definitely circumscribed, soft and semi-fluctuating. Puncture with a moderate size aspirating needle gave no result. The tumor was removed under chloroform. The large hole left after the operation looked alarming, but healed very kindly in the course of a few days, under boracic acid dressings. The tumor proved to be a lipoma, which, in so young a child, is very rare.—*British Medical Journal*, October 22, 1892.

Iodoform Injections in the Treatment of Tuberculosis of Joints.—In a report of several completed cases from Professor Nancrede's clinic, DR. C. G. DARLING describes the method adopted, and reports several cases. The emulsion used is composed of 10 per cent. iodoform in a mixture of equal parts of water and glycerine. This mixture is boiled half an hour, to thoroughly sterilize, and a fresh supply is prepared for every injection. That part over the joint selected for injection is carefully washed and covered with an antiseptic pad, the same as in all important operations. A small trocar is used, to which can be readily attached the syringe containing the emulsion. These instruments are carefully sterilized, and all air is driven from the syringe at the time of filling. The joint should be punctured at any safe point, and all fluid evacuated by gentle pressure. A recently sterilized 3 per cent. solution of boric acid is then used to wash out the cavity. This may be repeated until the fluid returns clear. The syringe is then attached to the canula, and 1 to 3 drachms of the emulsion is slowly injected. The iodoform is diffused about the cavity by kneading and manipulating the parts. The puncture is sealed with collodion and cotton. The joint is then fixed by a splint, and rest maintained for several days. The second injection may be made in one to three weeks, according to the extent of disease present, the amount of the drug employed, and the results following the injection, success depending upon the continuous action of the iodoform. The injections are frequently made without the use of an anesthetic, no pain being complained of two or three hours afterwards, unless a large injection be used. The success of these operations probably rests upon the aceptic method of performing them, maintaining complete rest of the joint, and not using the second injection until the first has done its work. Tuberculous lesions are, however, slow in recovering, and those of the joints prove no exception to the rule.—*New York Medical Journal*, October 29, 1892.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Treatment of Catarrhal Sore Throat.—DR. CARTER mentions a number of remedies for this class of cases which should be selected according to the variety and degree of inflammation present, and the condition and idiocyncracies of the patient. Hot wine gargles are recommended by some. Menthol, being an antiseptic and local anodyne, is useful, contracting the capillaries and checking secretions. In dry, cold weather, when the mucous membrane is parting with its moisture, which is nature's covering cloud, treatment with vaseline spray acts well. Cream and ice are particularly valuable in children who cannot use spray or gargle. The essential oils, by spray or nebulization, are also valuable in these dry forms. Solutions of chlorate of potash and permanganate of potash and other astringents are useful in this form of sore throat, when the secretion is profuse. They may be used either as spray or gargle. Where the secretions are too albuminous, or where there is a tendency to the formation of pelicles on the tonsils, a spray of peroxide of hydrogen is indicated. Yerba reuma, by atomization, is sometimes very valuable. In nearly all cases where there is general febrile disturbance, aconite and belladonna are invaluable.—*Journal of the American Medical Association*, November 12, 1892.

Conclusions in Regard to Operating for Mastoid Disease.—DR. D. MILTON GREENE has formulated the following rules as a result of his experience in treating mastoid diseases: (1) In acute suppurative otitis media, with drumhead freely open—if, after two or three days' treatment by thorough irrigation with hot boracic acid solution every two hours, and the tube and tympanum cleared by politzerization, pus continues to flow so that the canal is filled in an hour or two, and attended with rise of temperature and chills without other assignable cause, with swelling and bulging of membrane in upper and back of tympanum, with no swelling from above pointing downward, and no swelling below pointing upward, there is pus in the mastoid cells, and an operation is indicated and justifiable for the safety of the patient. (2) There is more reason for delaying mastoid operations, when pus evidently exists in the cells, than for the surgeon to delay operation in suppurative appendicitis, or in pelvic abscess. (3) Opening a mastoid abscess is not more dangerous to life than opening other abscesses. (4) If no pus is found in the mastoid, it heals quickly and no harm results, but if there is pus or extreme congestion, the operation does good and may save life. (5) The danger of death from opening a healthy mastoid is not as great as the danger of pus existing in the cells in cases of acute suppurative otitis media, where the signs and symptoms already mentioned exist. (6) If pus exists in the cells it is a sound surgical principle that it be removed before it has caused disease of contiguous structures. (7) When death follows mastoid operations it is from disease for which the operation was done, and not due to the operation. (8) Suppuration in the cells with early suppurative mastoid periostitis, is not as dangerous to life as where the latter does not exist, for such concomitant tends to soften the dense external bone and favors spontaneous external perforation. (9) When swelling and tenderness in the auditory canal is extreme, so that an examination of the middle ear is difficult or impossible, it should be done under an anesthetic. (10) In acute suppurative otitis media, a rise of temperature to 104° or 105° F., with chills or rigors, does not contra-indicate opening the cells. (11) Chisels are the best instruments with which to open the mastoid, commencing with the tip of the process, and cutting upward and forward.—*Journal American Medical Association.*

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

Skin Grafting in Syphilitics.—DR. HARTLEY presented two cases to the New York Surgical Society which illustrated skin grafting in the different stages of syphilis. The first patient had had syphilis twelve years ago and had been treated in hospital from time to time for eight years. Some time ago when the left side of the patient's face and neck had ulcerated the speaker tried skin grafting, but the grafts failed to take. In these cases the disease had been active. In the second case, which had been treated in the hospital from time to time for five years, the speaker believed the disease to have practically run its course. In this instance the grafts had all taken and the wound healed since the operation. He thought these cases well illustrated the fact that the disease must have practically run its course before skin grafting would succeed.

In the discussion following, DR. WILLEY MEYER agreed with Dr. Hartley. In one case of syhilitic ulcer of the leg, where he had grafted, he had been sure at the end of ten days that the grafting would be be a success. Afterward the whole graft had come away.—*New York Medical Journal*, August 27, 1892.

Epididymitis Complicating Typhoid Fever.—GIRODE treated (*Archiv. gen. de med.*) a case of typhoid in a man of 29 years of age, which in the third week became complicated with epididymitis right sided. The case soon terminated fatally. *Post-mortem* examination showed that the nature of the disease was purulent and a microscopic examination revealed multitudes of the Eberth bacillus in the pus.—*Centralblat f. klin. Medicin.*

MATERIA MEDICA AND THERAPEUTICS.

By Wm. Watt Kerr, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

The Digestive Ferment of the Carica Papaya in Gastro-intestinal Disorders.—Dr. Frank Woodbury suggests the name "caricinum" or "caricin" for the papain of Finckler. Its physiological actions have been established to be upon albuminoids, hydrating them and converting them ultimately into peptones, converting with great promptness starch, the ultimate product being maltose, emulsifying fats, and possessing a direct tonic action upon the stomach, stimulating the secretion of gastric juice or pepsinogen, being also distinctly antiseptic, and given with true antiseptics, like salol, will not leave the digestive action checked. Even corrosive sublimate in dilute solutions does not interfere with its digestive powers. It acts at all temperatures, best in alkaline solution, but also in fluids with an acid or neutral reaction. It has no action upon living tissues and is positively innocuous when swallowed in any quantity that is likely to be administered. He summarizes its use as follows: (1) In actual or relative deficiency of gastric juice or its constituents: (*a*) Diminished secretion of gastric juice as a whole: apepsia, anemia, and deficient blood-supply, wasting disease. (*b*) Diminished proportion of pepsin: atonic dyspepsia, atrophy of gastric tubules. (*c*) Diminution of hydrochloric acid: achlorhydria, carcinoma. (*d*) Relative deficiency of gastric juice: overfeeding. (2) In gastric catarrh: (*a*) When there is tenacious mucus to be removed. (*b*) When there is impaired digestion. (3) In excessive secretion of acids. To prevent duodenal dyspepsia. (4) In gastralgia, irritable stomach, nausea, or vomiting. (5) In intestinal disorders: (*a*) In constipation due to indigestion. (*b*) In diarrhea, as a sedative. (*c*) In intestinal worms [not verified by author]. (6) In infectious disorders of the intestinal tract: (*a*) When there is abnormal fermentation. (*b*) As a detergent in cleaning out the debris. (7) In infantile indigestion. The dose is 1 or 2, possibly 5 grains, either alone or combined with bicarbonate of soda, extract of nux vomica, or both.—*New York Medical Journal—American Journal of Medical Sciences*, November, 1892.

Nerium Oleander.—After giving a historical and botanical sketch of this new cardiac tonic, V. Oefele (*Aerztl. Rundschau*) records his clinical investigations with its various preparations. From its use in 73 cases of cardiac disease he concludes, among other things, that the leaves, cortex and fruit have a therapeutic action which places the drug in the digitalis group; that alcohol dissolves out certain constituents which act as irritants to the alimentary tract; that the most suitable preparation is a concentrated infusion to which alcohol and glycerine may be added, thus converting it into a stable infusion tincture; and that the effect of the remedy is prompt and lasting. The pulse becomes slower, more regular and more powerful. Diuresis with increase of the solid urinary constituents is brought about and the stools are more abundant. The palpitation, edema, and dyspnea of valvular disease disappear. The diuresis is more marked than with any other member of the digitalis group. Oleander, like convallaria, differs from adonis in increasing peristalsis. It has no such action on the vessels as strophanthus, and may thus be given in atheroma. It differs from carpainum hydrochlorate, which has only a momentary action, and which is to be recommended for subcutaneous injection. Oleander is indicated, both in the young and old, in cardiac and renal diseases, with their concomitants, such as irregular and feeble pulse, palpitation, edema, and dyspnea. It may be used also in diseases of the myocardium and in atheroma. It is contraindicated if diarrhea or vomiting be present. A small daily dose is from 0.05 g. to 0.5 g. of the raw drug.—*British Medical Journal*, October 22, 1892.

MEDICINE AND PATHOLOGY.

By **Albert Abrams, M. D.**, Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

The Etiology of Acute Bright's Disease.—Agnes Bluhm (*Deutsch. Archiv. f. klin. Med.*) has classified the causes of all cases of Bright's disease occurring in the Medical Clinic at Zurich, during a period of 5½ years. The infectious diseases are the chief cause of acute Bright's disease, occurring as it does after typhoid fever, acute exanthemata, erysipelas, variola, diphtheria, tonsillar angina, croupous pneumonia, acute peritonitis, and acute miliary tuberculosis. Among the chronic infectious diseases, tuberculosis and syphilis are mentioned; a number of skin diseases are also included. Eczema, psoriasis, tuberculosis cutis, and erythema nodosum. Among toxic causes, 3 cases are noted following the use of mercury, lead and thallin. Among the other causes of acute nephritis are mentioned: intestinal diseases, icterus, circulatory affections, pregnancy, leukemia, and gonorrhea. In 9 per cent. of the cases, no etiology could be determined. The causes of the chronic parenchymatous form of nephritis are more uncertain, but it was due in the larger number of cases to malaria, misuse of alcohol, and unhygienic conditions. Among the causes of genuine contracted kidney, syphilis was present in 11 per cent. and arteriosclerosis in 17.7 per cent. of the cases; misuse of alcohol and lead were also concerned in the etiology of this form of nephritis. Regarding the development of acute nephritis after acute infectious diseases, it was observed that neither the severity nor the course of the primary affection exerted any special influence on the nephritis.—*Centralblatt f. klin. Medicin.*

The Knee-jerks in Supervenosity.—Hughlings Jackson has observed that knee-jerks are absent in some cases of emphysema with bronchitis, where the blood has become venous to an extreme degree. Dr. Russell, at his suggestion, examined the knee-jerks of a dog, artificially asphyxiated by clamping its trachea; the animal's knee-jerks became exaggerated until knee clonus was produced; but in the third stage of asphyxia, no reaction could be obtained. As asphyxia diminishes, and in an extreme degree annuls, the excitability of the motor cortex, it may be that the preliminary exaggeration of the knee-jerk observed by Dr. Russell, was owing to loss of cerebral control upon lumbar centres, and that these spinal centres succumbed later to the influence of supervenous blood, than did the controlling cerebral motor centres. When oxygen is given to cyanosed patients, their knee-jerks should be tested before and after the gas is administered. If successfully used, that is, if the patient's blood becomes well oxygenated, it is possible that knee-jerks obtainable before administration of the gas, may be elicited afterwards. If supervenosity causes loss of the knee-jerk, the fact may be important with reference to the apoplectic state, and also with regard to post-epileptic coma. In some cases of apoplexy from cerebral hemorrhage, the knee-jerks are lost, in others not. The author suggests investigating these points in all cases of supervenosity.—*British Medical Journal.*

Syphilitic Spinal Paralysis.—Erb (*Neurol. Centralblatt*) has noted for years a characteristic symptomatic picture presented by patients with spinal affections who have had syphilis. The affection is characterized by gradual developing paresthesiæ, later, pronounced spastic pareses and rarely actual paraplegia. The patients have a spastic gait and the reflexes are exaggerated.

Disturbances of sensibility are slight. Almost always vesical weakness and decreased sexual potency are present. Atrophy of the muscles is absent. Electric irritability is unchanged. The upper half of the body is normal. The affection shows a tendency to improvement; this is especially the case after energetic specific treatment, and the patients fully recover. The symptomatic picture here presented is somewhat analogous to that of spastic spinal paralysis, but it is differentiated from the latter affection by disturbances of the bladder and sensibility, the slight tension of the muscles, and, of course, by its origin. Syphilitic spinal paralysis occurs usually during the first six years after syphilitic infection, and is a less common affection than tabes.—*Wiener med. Presse.*

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

The Subcutaneous Use of Salt Solution in Cases of Insanity.—DR. GEORGE ILBERG has made use of subcutaneous injections of a ¾ per cent. solution of chloride of sodium in cases of insanity where there was persistent refusal of food and threatened exhaustion. The amount of fluid injected was 500 to 700 c. cm., kept at a temperature of 30 to 37° C. The absorption of the solution was aided by gentle massage. He employed this method of nourishment in the cases above mentioned, where satisfactory artificial feeding by means of the stomach or rectal tube is impossible. In other cases where the stomach tube could be successfully passed, the solution materially improved the depressed circulation. In cases where the patient could be coaxed to eat, not altogether refusing food, he generally would eat spontaneously soon after the administration of the injection. Dr. Ilberg subjected himself to this treatment after a week's low diet, in order to understand this result. He experienced a pungent and burning taste about an hour after the solution had been injected, associated with a profuse salivation. He thinks it is to relieve these unpleasant sensations that the patient accepts the food. If the method should not be successful, recourse to the stomach tube still remains.—*Neurol. Centralblatt—Journal of Nervous and Mental Disease.*

A Case of Encephalitis Terminating Fatally Following a Hypnotic Seance.—At a public meeting held at Corbeil on the 31st of March, last year, for the purpose of making demonstrations of hypnotism, a gentleman 52 years of age offered himself as a subject. He was a man of great powers of imagination, highly intelligent, and had made a great study of animal magnetism. On a number of days following the meeting his thoughts dwelt constantly on the events of that evening. On the 10th of April, his family noticed that he had become quite eccentric. On the 16th, he went to Paris, and immediately upon his return became delirious and very excitable, and the beginning of an encephalitis was diagnosed. On the 22d of April, coma set in, and he died after a few hours. The author believes that the hypnotic seance, by overstimulating a very impressionable brain, indirectly caused the encephalitis.—*Weiner med. Wochenschrift—Centralblatt f. klin. Medicin.*

Syphilis a Bar to Marriage.—The Court of Appeals of Kentucky has recently decided that syphilis, pleaded in answer to an action to recover damages for breach of promise, is a complete defense, following the decision of the Supreme Court of the State of North Carolina, in which the same defense was interposed and sustained in a similar action.—*Medical Review.*

FORMULÆ.

By Geo. B. Somers, M. D., San Francisco, Cal.

Hyperidrosis. — KAPOSI recommends:

Naphthol ---------------- ʒ i
Glycerine ---------------- ℥ ii
Alcohol ---------------- ℥ iiss—M

In excessive sweating of the feet use as a wash twice a day. Afterwards powder with:

Naphthol ---------------- ʒ ss
Starch ---------------- ℥ vss—M

This is placed between the toes with the aid of pieces of cotton.

In the morning the following powder may also be introduced into the stocking:

Talc ---------------- ℥ i
Subnitrate of bismuth --- ʒ ix
Permanganate of potash - gr xxx
Salicylate of soda -------- gr xx—M

—*Union Médicale.*

Diphtheria.—OZEGOROSKI strongly recommends the treatment of faucial diphtheria by painting with the following mixture:

Acidi carbolici cryst.
Acidi citrici cryst.
Tr. iodi ---------------- āā ʒ i
Cognac or champagne --- ℥ iii—M

S.—To be painted on with a cotton-wool swab every two or three hours. As adjuvants, liberal diet, acid drinks (lemonade), and in older children gargles of chlorate of soda or potash.—*Therapeutic Gazette.*

Benzoate of Soda.—LIÈGEVIS, in an exhaustive paper on the value of benzoate of soda, gives the following formulæ:

(1) *Laryngitis with acute bronchitis:*

Benzoate of soda -------- ʒ i
Tinct. aconite ------------ ♏ xx
Cherry laurel water ------ ʒ i
Syrup tolu.
Syrup codein ---------- āā ℥ ii
Water ------------------ ℥ ii—M.

S.—To be taken in 24 hours.

(2) *Bright's disease:*

Benzoate of soda.
Tannin ---------------- āā ʒ iss
Ext. gentian q. s. M.
Divide into 100 pills.

S.—Six daily.

(3) *In uric acid gravel.* It transforms insoluble urates to soluble hippurates, and as a cholagogue it occupies the first rank.

Benzoate of soda.
Salicylate of soda.
Rhubarb (in powder) -- āā ʒ i
Nux vomica (in powder) - gr x
Divide into 20 powders.

S.—Two daily.—*Medical Press and Circular.*

Rigid Perineum:

Chloroformi.
Etheris sulphurici ---- āā ℥ ii
Listerine ---------------- ℥ i—M.

S.—Apply locally.—*Annals of Gynecology and Pediatry.*

PUBLIC HEALTH.

By W. R. Cluness, M.A., M.D., Sacramento, Cal.

Mortality for October.—The deaths registered in 111 town districts of the State during the month of October, in a population of 808,603, correspond to an annual rate of 14.23 a thousand, the total mortality having been 959. 173 deaths were due to zymotic diseases, giving an annual rate of 2.57 a thousand. Of these, 21 were due to diphtheria, 15 to croup, 41 to typhoid fever, 38 to cholera infantum, 29 to diarrhea and dysentery, 1 to cerebro-spinal fever, 18 to scarlet fever, 1 to measles, 3 to whooping cough and 6 to remittent fever. 185 deaths resulted from diseases of the respiratory organs, giving an annual rate of 2.74 a thousand. Of these 112 were due to consumption, 46 to pneumonia, 25 to bronchitis and 2 to pulmonary congestion; the rate being for consumption and pneumonia 1.64 and .686 respectively. 73 deaths resulted from diseases of the heart. The average annual death rate from all causes occurring in the ten largest cities and towns in the state, and representing a population of 565,800, was 15.19 a thousand. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from Alameda, the lowest from San Diego.

The Effect of Cleanliness on the Death Rate from Zymotic Diseases.—The commendable spirit manifested by our national authorities at Washington, the various State Boards of Health, municipal governments, and by the people generally, in their efforts to prevent the introduction of cholera into America has been followed by such a general cleansing and purification as to have already favorably affected the mortality throughout the whole country. To what extent the general death rate will have been diminished by the extraordinary sanitary precautions so universally carried out, can, of course, never be definitely determined; but that it will be favorably influenced thereby is plainly manifest already throughout California, as can be observed by a comparison of the death rate from filth diseases during the months of September and October of this year with the same months of the past six years. Had this falling off in the mortality from typhoid fever and diphtheria in particular been noticeable for but a single year, or even for two or three years, it might be justly attributed to fortuitous circumstances alone; but when it is known to have extended over the period of years specified, the result may fairly be credited to the improved sanitation induced by the cholera scare. It is, therefore, apparent that a large number of deaths occur annually because of the non-observance of the laws of health, and that those deaths are unnecessary because they are preventable. It is also well known that typhoid fever and diphtheria, both filth diseases, cause a much greater fatality everywhere than cholera, and that by the adoption of proper sanitary measures they can be prevented. Indeed, it is probable that typhoid fever is the most preventable of all diseases, smallpox not excepted. Like cholera, its germs are contained in the evacuations from the bowels, and like it, also, those germs find access to the drinking water, and thence to our systems. The cases that occur otherwise are quite rare. By observing the precautions that have been heretofore suggested regarding the disinfection or destruction by fire of the evacuations in cases of cholera, and by avoiding the drinking of contaminated water, this disease can also be prevented. The history of the recent cholera epidemic emphasizes these truths, for if there existed a missing link in the chain of evidence it has been found many times in Hamburg and vicinity, in Holland and in Belgium. Recently cholera germs have been found in the water of the Rhine at a point where the dejecta of a cholera patient had been cast into the water. Buda Pesth, whose water supply is obtained from the Danube, is now being severely scourged. MR. ERNEST HART, the editor of the *British Medical Journal*, who has studied the subject most carefully, tells us that it is a "filth disease carried by dirty people to dirty places," and "propagated mainly, if not wholly, in the epidemic form by water." Water, he says, is invariably the *causa causasis* of European epidemics, and the great distributing agency. These views obtain confirmation in a negative manner by the results of the introduction into New York recently of the germs of the disease. Had they been communicated to the water supply the inhabitants of that city would unquestionably have been severely scourged. As it was, only a few sporadic cases existed, and the source and mode of diffusion of the germs being well known, those were promptly and effectually isolated, the premises thoroughly disinfected, and the spread of the disease prevented.

The Value of Quarantine in Cholera.—Much reliance has recently been placed upon quarantine as a means of preventing cholera from extending to uninfected countries, but unless quarantine be absolute and continued until biological investigation has demonstrated the entire absence of the specific germ from the dejections of cholera-infected persons it is liable to be conveyed by them to healthy localities. Detention for a specified period, even the 20-days' quarantine ordered by President Harrison on the 1st day of September last, may prove illusory, as has recently been made apparent in Hamburg. **DR. T. W. HIME**, of Bradford, in a communication to the *British Medical Journal*, dated Hamburg, October 1st, says on that day Dr. Cornet, of Berlin and Reichenhall, had discovered that the generally accepted idea, when a cholera patient had succeeded in resisting an attack of the disease, it was owing to his organism having not only withstood the onslaught of the microbes and the virulence of their morbific products, but that the invading microbes had perished within his body, is erroneous. On the contrary, he had discovered incontrovertible evidence that the cholera microbes in an active state may be carried about by convalescents in their intestines, and thus be the means of disseminating the germs long after they have been considered safe and incapable of communicating the disease. It is now also pretty clearly demonstrated that the choleraic diarrhea, which so often precedes epidemics of cholera, is true Asiatic cholera; and there can be little doubt that were municipal authorities to recognize the truth of this statement, and thoroughly isolate all initial cases, epidemics would occur much less frequently. The first cases of all acute infectious diseases are usually mild, hence the great importance of adopting the most active measures to stamp them out in their incipiency. The inadequacy of State quarantine in establishing immunity from cholera is probably due to the non-observance of these factors in the problem, and so long as convalescents are allowed to enter uninfected localities while the germs of the disease are still active in their systems just so long will quarantine prove ineffectual. The importance, therefore, of bacteriological investigation in connection with quarantine becomes apparent; but although much has been learned concerning cholera during the recent epidemic, yet there is still much that is either obscure or wholly unknown.

METEOROLOGY.

Summary for October.—*Temperature.*—The normal temperature in the State for October is 60°, and the mean or average temperature for October, 1892, is 53°, a departure from the normal of —7°, showing this month to have been much cooler than it usually is. The highest monthly mean temperature was 73°, occurring at Needles; and the lowest 48°, at Susanville. The highest or maximum temperature was 103°, at Needles; and the lowest or minimum temperature 26°, at Susanville; The greatest monthly range was 70°, at Winchester; and the least 31°, at Berkeley.

Rainfall.—The normal precipitation in the State for October is 1.09 inches, while the average for October, 1892, is 1.32 inches, showing a departure from the normal of +0.23 of an inch. The greatest monthly precipitation was 5.84 inches, at Crescent City; while there was none at several places. The unusual meteorological feature of the month was the extremely severe thunder and lightning storm that passed over the vicinity of Pasadena on the 28th, flooding a mountain stream called the "Arroyo Seco" with a wave of water five or six feet high, which luckily caused but slight damage. It was estimated that two or three inches of water fell in less than half an hour along the mountain. The lightning flashes were very vivid and blinding.—JAMES A. BARWICK, Director California Weather Service.

California—Tabular Statement for October, 1892.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean. Daily Range	No. of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	63.6	90.0	44.0	------	------	------	----	1.76	------	----	----	----	N. E.	Southern Pacific Company.
Berkeley......... "	55.5	76.0	45.0	66.4	52.2	14.2	3	1.99	83.0	12	9	10	N. & W.	Obs. University of California.
Colfax............ "	56.8	87.0	34.0	------	------	------	----	2.20	------	----	----	----	N.	Southern Pacific Company.
Eureka........... "	53.6	69.0	40.0	59.5	47.8	11.7	9	2.90	93.0	11	5	15	N.	Weather Bureau Dept. Agr.
Fresno........... "	64.0	94.0	36.0	77.1	50.7	26.4	2	0.34	55.0	13	13	5	N.W.	" " "
Keeler........... "	59.8	83.0	35.0	69.9	49.8	20.1	4	0.81	37.0	16	4	7	E.	" " "
Los Angeles.... "	64.0	96.0	40.0	76.0	52.1	23.9	4	0.33	69.0	12	13	6	W.	" " "
Monterey .... "	56.6	78.0	36.0	------	------	------	----	0.00	------	----	----	----	S.	Southern Pacific Company.
Napa.............. "	59.0	83.0	39.0	71.2	49.4	21.8	5	1.58	72.0	17	11	3	S.	Station Napa Insane Asylum.
Oakland......... "	56.4	76.0	41.0	67.3	49.2	18.1	9	2.51	86.0	14	10	7	W.	Chabot Observatory.
Paso Robles.... "	58.8	96.0	33.0	------	------	------	----	0.46	------	----	----	----	S.	Southern Pacific Company.
Red Bluff....... "	64.0	97.0	41.0	75.5	51.5	24.0	7	1.42	56.0	19	8	4	N.W.	Weather Bureau Dept. Agr.
Sacramento. ... "	62.0	93.0	40.0	75.0	49.0	26.0	7	0.70	65.0	21	8	2	S.	" " "
San Bernardino "	61.4	95.0	35.0	75.6	47.2	28.4	4	0.16	62.0	15	7	9	W.N.W.	A. K. Johnson, M. D
San Diego....... "	62.7	83.0	46.0	70.6	54.8	15.8	6	0.22	75.0	12	11	8	W.	Weather Bureau Dept. Agr.
San Francisco.. "	59.6	79.0	47.0	66.7	52.5	14.2	6	1.65	78.0	18	5	8	W.	" " "
Santa Barbara.. "	62.0	91.0	43.0	72.2	51.8	20.4	3	0.26	76.0	17	9	5	W.	Hugh D. Vail.
Santa Cruz...... "	59.7	83.0	41.0	------	------	------	----	0.92	------	----	----	----	S.W.	W. R. Springer.
Yuma............A. T.	72.2	100.0	42.0	86.8	57.7	29.1	0	0.00	------	24	7	0	N.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: DECEMBER, 1892.

THE COMMENCEMENTS.

The Commencement Exercises of the California College of Pharmacy were held in Odd Fellows' Hall, November 10, 1892. After the address by the REV. J. B. SILCOX, the degrees were conferred by PROF. MARTIN KELLOGG, acting President of the University. PROF. WILLIAM M. SEARBY then delivered the valedictory on behalf of the faculty.

After some preliminary remarks on the necessity of combining business capacity and tact with scientific knowledge, he proceeded to direct attention to some inroads that had recently been made in the revenues of pharmacists. The first of these was by the manufacturing pharmacies employing the best talent, backed by unlimited capital and facilities. These establishments could turn out first-class products at a lower rate than that at which the retailer could make them. Against this competition nothing could be done, and he advised that the retail pharmacist should employ these products when advantageous to do so, confining himself to the manufacture of articles which he could engage in more advantageously.

A second inroad consisted in the large number of proprietary preparations which had been "foisted upon the medical profession." These were sold at high prices, and the margin on them was small. Several of them were enumerated, and the speaker stated that they were no better than the druggist could make and at one-quarter the cost. All this necessitated the carrying of a large and expensive stock. Another inroad was due to the abuse of free dispensaries, which were frequently used by persons abundantly able to pay for medicine, that was given at often less than its cost. Lodges and secret societies furnished a similar opportunity for abuse. Here medicines were dispensed by a pharmacist under contract, who often did not get the cost of the drugs, the contract having been taken with the expectation of incidental business in connection with it.

The speaker then alluded to the disreputable commission business, as follows: "Another inroad is the paying of commissions to physicians, which diverts business from the conscientious pharmacist who declines to pay such commissions, while his unscrupulous neighbor pays them.

The one who pays the commission does not thereby forego any of his profit. The patient pays for it all, but the business is so generally regarded as dishonorable that I take it for granted that you will not condescend to obtain business in that way. You will rather content yourselves with a smaller business and a good conscience, than make money by that method. Better live on bread without butter than on the fat of the land obtained at such a sacrifice of principle."

The following are the names of the graduates: August Airaldi, Edward Albert Bagot, Frederick Cogswell, Thomas Joseph Crowley, Augustine Angelo Cavagnaro, La Fayette Ney Des Marais, William Edwards, Jay Ernest Fox, Charles John Gienger, Robert Hamilton Hawkes, George Franklin Hanson, M. D., Edward Anthony Heinzeman, George Bernard Hund, Thomas George Inman, Thomas Edwin Johns, Frederick Lau Janeck, Wilfred Harvey Kellogg, William Henry Lann, Joseph Benjamin Nightingale, George Louis Painter, Charles William Polk, Chester Bennett Pooler, Grace Mabel Potter, John Preuss, Samuel Stodole Peck, B. S., David Richard Rees, Thomas Bryan Roche, Peter Aloysius Ryan, John Bryant Skinner, William Sampson Stock, B. A., Solomon Albert Sharp, Albert John Villain, Paul Wechsler.

The total number of students in attendance during the past session was 106; the number of matriculates being 50.

THE MEETING OF THE CALIFORNIA PRESS ASSOCIATION.

The fourth annual meeting of the California Press Association was held in Pasadena, November 15th and 16th. The meeting was eminently successful in point of numbers in attendance, and the accession of new members was unusually large. Representatives of the local press were untiring in their efforts in behalf of the comfort and pleasure of the visitors, MR. SCIPIO CRAIG, of the Redland *Citrograph*, and MR. CHARLES A. GARDNER, of the Pasadena *Star*, being foremost among the hosts. The Southern Pacific Company, the California Southern Railroad and the Los Angeles Terminal Company, did all that was possible to make the meeting and its attendant pleasures a success.

On the second day of the meeting Pasadena's hospitable citizens turned out in strong force, and vehicles were provided that enabled the visitors to see the beauties of that fortunately situated city. Later in the afternoon the Association was entertained by PROF. LOWE, who, with his family, gracefully dispensed the hospitality of Southern California. PROF. LOWE is at present interested in the construction of the railway on Mount Wilson, in connection with the proposed observatory at that point.

In addressing the Association he mentioned the aid that he had always obtained from the press and the many obligations it had rendered him in the furtherance of his projects. He also humorously referred to his experience during the civil war, when there were, perhaps, more newspaper men about his tent than at any other point in the camp. Almost the entire basement of their residence has been devoted to a museum, which is MRS. LOWE'S especial pride. As a private collection, in extent, variety, and intrinsic merit it can hardly be surpassed in this country. The collection of Indian curios is particularly fine, and the specimens of basket work representing the North American tribes is practically complete. On the day following adjournment, the Association was given the opportunity of seeing many points of interest in Southern California by an excursion round the "kite-shaped track" of the Santa Fé Company. At Orange the party separated, some returning home *via* Los Angeles, the greater number proceeding to San Diego and Coronado.

Even in California, with its matchless climate, there is room for something to be said of San Diego as "special mention." On November 18th the maximum temperature at Coronado was 87° F., the temperature of the surf being 57°, making a sea bath enjoyable. A sea breeze coming in each morning with the regularity of clock work, to disappear at sundown; a land-locked harbor, with moderate tides; a country that, while bold enough for scenery and beauty, is topographically such that "squally" weather is unknown, all combine to make a seaside resort without a single disadvantage. The Hotel Coronado, situated on an island of that name, and within a few yards of the waters of the Pacific Ocean, offers every accommodation to the pleasure seeker or the invalid. In this establishment there are no "inside rooms," those in the interior opening on a handsome court, bright with sunshine and flowers. In this spot an out-door life is possible during the entire year, and for those who need sunshine without exposure, spacious porches enclosed in glass have been provided. For these advantages provided by nature and art the charges are moderate, and the seeker after health or pleasure will never regret a visit to Coronado.

THE RECENT CHANGE AT THE STOCKTON ASYLUM.

On October 10, 1892, the Board of Directors of the State Asylum at Stockton elected DR. ASA CLARK as Superintendent to succeed DR. H. N. RUCKER, whose term expired November 1st. DR. CLARK is in politics a republican, while DR. RUCKER is a democrat. The Board of Directors is republican in majority, and on these facts charges of political favoritism have been freely made in the democratic Press.

Unlike the legal profession, medicine has no relation to "politics," and it is in everyway regrettable when that discordant, but all powerful element, interferes with our State institutions. We do not believe that the stage has been reached when, as a rule, anything else can be expected. It can only be hoped that the successor of opposite political faith may be at least an equal in professional attainments and capacity.

In the case under discussion, one of the directors states that the assertion that "political reasons" had anything to do with the change, is "unequivocally false and without any foundation whatever." It is a fact that DR. CLARK had not applied for the position and we have reasons for knowing that he would not have accepted it had it been possible to reëlect DR. RUCKER. Careful investigation fails to show that "political reasons" had anything to do with the case, or that the directors were influenced by aught than the best interests of the asylum. The position of superintendent of an institution involving the management of a large number of persons, and the disbursement of a great deal of money, demands qualifications of an exceptional character that are altogether extra professional. To say directly, or by implication, that DR. RUCKER was lacking in these, by no means reflects on his qualifications as a physician, and it is regrettable that this point may have been overlooked in the controversy that supervened.

It would certainly, in the selection of such an officer, seem that experience was a most desirable qualification. Yet it will be recognized that in California, the number of those who have occupied positions, enabling them to so qualify, is exceedingly small. In this respect DR. CLARK'S record is certainly unique. Thirty years ago he commenced his service as assistant physician at Stockton, a position he filled for ten years, retiring to establish a private asylum in that city, which he still maintains. During the twenty years that have since elapsed the private asylum has been liberally patronized, and prior to the establishment of State institutions, it has cared for the insane of the State of Nevada, and the Territory of Arizona. The successful management of such an institution is a practical guarantee of capacity too evident to need elaboration, or even comment.

NOTES.

American Orthopedic Association.

At the recent meeting of the American Orthopedic Association, the following officers were elected for the ensuing year: President, A. J. Steele, St. Louis; Vice-Presidents, Samuel Ketch, New York, Arthur J. Gillette, St. Paul; Treasurer, A. B. Judson, New York; Secretary, John Ridlon, 34 Washington street, Chicago. The place of meeting for 1893 will be St. Louis.

Railway Surgery at the Pan-American Medical Congress.

A section of railway surgery of the Pan-American Medical Congress has been organized, with Dr. C. W. P. Brock, of Richmond, Virginia, as executive president. A full list of officers has been provided for each of the constituent countries. At the eleventh annual meeting of the Wabash Railway Surgical Association—the first organization of the kind—Dr. C. B. Stemen, of Fort Wayne, was, by unanimous resolution, requested to prepare a paper on "Organized Railway Surgery" and read the same before the section on railway surgery of the Pan-American Medical Congress. At the same meeting Dr. Hal C. Wyman, of Detroit, offered the following, which was unanimously adopted: Resolved, that each member of this association solicit his congressman to interest himself in legislation in favor of the Pan-American Medical Congress.

Ascites or Pregnancy.

An unfortunate error in diagnosis and treatment was recently made in the city of Stockton, and has become public property through the medium of the papers. It appears that a Mrs. Ford, who had previously borne five children, consulted a physician for what she supposed was stomach trouble. The gentleman in question informed her that she was pregnant, and that the supposed trouble was due to her condition. The patient, however, was not satisfied and later consulted Dr. Beede, of that city, who told her she was not pregnant but suffering from dropsy. As the "swelling" persisted under internal treatment, he decided to tap, and the operation was accordingly performed with the assistance of another practitioner. No fluid was found, but on the following day the woman was delivered of male twins, apparently of about four months' growth. The woman was seriously ill for some time, but has now recovered. While distressing mistakes of this character have been made before, it certainly appears that in the present case there was but little excuse for the error. A history of pregnancy in a married woman, and the opinion of a physician that this condition existed would certainly demand most careful investigation. With twin pregnancy of over four months duration, it is difficult to see how, even in the absence of a positive diagnosis, there would not have been ample grounds for suspecting something more than ascites.

The Bureau of Hygiene and Sanitation, World's Columbian Exposition.

The Bureau of Hygiene and Sanitation of the World's Columbian Exposition has been organized to prepare a collective exhibit illustrative of the present condition of sanitary science. The Bureau will seek to set before the visitors to the Exposition such a representation of sanitary work and sanitary aids as will help to lift the general mind to a higher plane in its estimate of the work of sanitation. Not even the most exaggerative optimist would assert that the sanitary arrangements of our chief and best-cared-for cities are perfect, while it is well known that those of smaller towns and villages are of the most reprehensible type. On the other hand, the pessimist cannot deny that the last two decades have seen very great and very marked improvements in the theory of hygiene as a science and in its practice as an art. While much in front of most other countries, the United States, with a death-rate to-day of 18 per thousand, has an arduous advance to make. The United States has been the pioneer and is still the leader in so many departments of the world's progress that it can scarcely be too enthusiastic to hope that she may rapidly forge to the front and assert her claim to be the leader in sanitation. The aim of the Bureau of Hygiene and Sanitation will be to show as adequately as possible the position in which the theory and practice of hygiene stand at the present day, and it is hoped that universities and colleges, boards of health, State and municipal societies, having hygiene and sanitation as their keynotes, scientists and physicians, will cordially coöperate in the endeavor to make the exhibition worthy of the science and of our country.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, October 25, 1892.

The President, G. L. SIMMONS, M. D., in the Chair.

Appendicitis Operation—Recovery.—DR. T. W. HUNTINGTON reported the following case: F. F———, a railway passenger conductor, aged 52 years, was admitted to the Southern Pacific Company's Hospital September 7, 1892. June 21st of the present year he suffered an attack of localized pain in the right side and groin, which was regarded by his attending physician as due to "billous colic." The trouble was controlled in a week, but left a tender spot at McBurney's joint. This feature had not entirely subsided when a second similar attack occurred, August 21st. He was then confined to bed several weeks, and has not been able to resume work since. At this time a diagnosis of appendicitis was made. Examination at time of entrance to hospital revealed great tenderness over head of colon, which could be distinctly outlined beneath the abdominal walls as a hard tumor. An operation for removal of the appendix was advised and accepted. On September 8th, the patient having been properly prepared over night, I opened the abdomen by a three-inch curved lateral incision, the lower end of which was a little below the anterior superior spine of the ilium, thence it extended upward along the outer margin of the tumor. Upon exploring the abdominal cavity the head of the colon was found tied down and covered in by adhesions. The mass was hard and resistant, there being an entire absence of characteristic elasticity. After long and patient search the appendix was found buried beneath the head of the colon, and it was only uncovered by carefully separating the adhesions and turning the tumor upon its side. In doing this the appendix was torn across at about the middle. A silk ligature was passed round the proximal portion, but, in tying, the silk cut through the tissue, thus amputating the remnant unceremoniously. The orifice left was closed by a couple of fine silk sutures. The distal end of the appendix was then dug out of its bed of adhesions. The entire appendix was found to be soft and friable, and in its removal it was so broken and torn that the exact condition could not be determined. It is certain, however, that as a result of former inflammation its walls were degenerated and softened to a marked extent. The external wound was closed and the subsequent history of the case was that of uneventful progress to recovery. The patient was discharged October 1st, 22 days after the operation.

It is essential in dealing with this subject that a distinct line be drawn between appendicitis and its very common sequela perityphlitic abscess and septic peritonitis. The need of a clear appreciation of the pathology of these different conditions must certainly be apparent in seeking a rational and safe method of treatment. That we have septic infection in either case is undoubtedly true. In the first instance, however, the trouble is hedged about by a well organized tissue wall. In the second we have a most vicious form of localized peritonitis, followed often by the formation of an abscess cavity and occasionally by general peritonitis. That there exists a logical relationship of cause and effect between these conditions admits of no discussion. In view of the fact that a very considerable proportion of cases of uncomplicated appendicitis recover without surgical interference, and in view of the companion fact that a very respectable number die without operation, a most interesting question arises as to when a given case is legitimately a subject for operation. In this connection it is self evident that we must eliminate from any series of cases quite a large number which are of so mild a type as to preclude any suggestion of surgical measures. These are of short duration, are relieved by active catharsis, and are doubtless due to acute catarrhal inflammation of the mucous lining. In considering the results attained by many authorities in the conduct of the more formidable cases, those which have been classed as fulminating or recurring, one can hardly escape the conviction that the best record is with the more frequent operator, especially with him who operates at the earliest period. I have studied the literature of this subject somewhat carefully during the past two years, and I have yet to find a fatality following an operation for uncomplicated appendicitis. Whereas, of 34 cases operated upon by Richardson (many being delayed operations) 38 per cent. died. With a very limited personal experience, and a fairly critical analysis of the reported cases of others, my feeling is that we had better operate upon a few cases unnecessarily, than now and then see one succumb a victim to procrastination. I believe it to be the surgeon's duty to advise an operation without reservation under the following conditions: (1) When the attack is severe and accompanied by tumefaction and intestinal obstruction. (2) When there have been one or more recurrences, especially if there be persistent tenderness or tumefaction at the seat of the disease.

Dr. Huntington also exhibited a specimen removed that morning. It consisted of the head and lower fourth of the ascending colon. The portion excised was involved in a general cancerous degeneration.

The Treatment of Opium Poisoning and a Report of Two Cases.—**Dr. F. R. Waggoner** read a paper upon this subject. He said that the cases reported had already been published in the MEDICAL TIMES (vol. iv, p. 475). His object in bringing them before the Society was more particularly to elicit discussion on the use of belladonna in these cases based on the physiological antagonism of this drug.

Dr. G. A. White believed that belladonna was a physiological antidote for opium. In one case he had washed out the stomach and then injected strong coffee, using belladonna internally. Patient recovered. In apomorphine we had a most valuable agent to produce emesis. There is often great difficulty in differentiating alcoholic from opium poisoning, and a preliminary injection of apomorphine was often of much service.

Dr. W. A. Briggs said hypodermic injections of caffein, electricity and oxygen are all useful in combating the toxic effects of opium, especially inhalation of oxygen. He had seen serious symptoms of belladonna poisoning from 45 minims of the fluid extract, and would hesitate to use as large doses as were mentioned in the paper of the evening. He thought that 30 minims was the maximum dose.

Dr. G. G. Tyrell said in one case of opium poisoning he had given ½ grain of atropine hypodermically, without apparent effect. A second injection also of ½ grain was given, and the pupils dilated. The patient subsequently succumbed. Belladonna often failed in its physiological antagonism, owing probably to individual idiosyncrasy. In one case he had seen a dose of $\frac{1}{6}$ of a grain produce grave effects. He was inclined to believe that if enough opium was taken the result was sure to be fatal in spite of treatment,

Dr. H. W. Strader believed that the accidental injection of air was often to blame for the serious effects occasionally seen with the use of morphine hypodermically. In his experience $\frac{1}{8}$ of a grain of morphine would have but little effect

Dr. J. H. Parkinson believed in the efficacy of atropine in opium or morphine poisoning. He had seen a number of these cases, and had always employed it. It should be used carefully and guardedly, watching for its physiological effects, and when these were obtained, suspending its use. It should always be remembered that atropine was also a narcotic, and that when given in combination it prolonged opium narcosis. Every dose injected would, therefore, have to be accounted for, and if the antagonism was not produced by moderate doses, it was not only useless but dangerous to proceed. He had usually given the $\frac{1}{120}$ to the $\frac{1}{60}$ as an initial dose, repeating it every 20 minutes or half hour until the effect was obtained, when it was suspended to be renewed when again required. He could not now recollect an instance in which he had given more than $\frac{1}{15}$ of a grain of atropine in any one case.

Dr. F. B. Sutliff mentioned a case of apparently fatal narcosis, produced by repeated injections of morphine. He gave 4 grains of caffeine, hypodermically, with good effect.

The President said he had used rectal injections of tincture of capsicum in doses of four ounces. It had a good effect from its stimulating and irritating qualities, and was better than flagellation.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, October 11, 1892.

The President, D. W. Montgomery, M. D., in the Chair.

The Surgical Treatment of Puerperal Endometritis.—**Dr. A. W. Perry** read a paper upon this subject. He said the extreme delicacy formerly shown in the surgical treatment of diseases involving the peritoneum has passed away, and the boldness of to-day had been followed by the best results. In connection with this class of cases he meant by "surgical treatment" curettage of the uterine cavity or douching, or both combined. This method of treatment is indicated when high fever or an accelerated pulse is present, or suppressed or fetid lochia. These conditions are caused by the introduction from without, through some lesion of the genital tract, of the germ of the streptococcus of erysipelas. If we wait until profound systemic intoxication has been produced, local treatment cannot accomplish much. The method of procedure is as follows: Introduce a large sized English catheter into the uterus and wash out the cavity with 3 or 4 quarts of a warm solution of sublimate, carbolic acid, thymol, or iodine. If this does not produce any marked improvement inside of 8 hours, use the dull curette, scraping lightly and then thoroughly douche the uterus. The dull wire curette only should be employed, as there is danger of perforation by the sharp spoon. The toxic effects of injections can be avoided by using mild and equally effective antiseptics. The speaker felt as little hesitation in using the curette in puerperal endometritis as after an early abortion with retention of the secundines.

Dr. Beverly McMonagle said the cause of puerperal endometritis is the retention of septic matter in the uterus. With cleanliness we have very little endometritis, but it sometimes appears, when cases have been under apparently favorable conditions, that the lymphatics take up septic matter very rapidly. The prevailing opinion seems to be to clean out the cavity, washing it with an alcoholic solution of carbolic acid. Some use simple douches of bichloride solution, but he would make it more of an operation by exercising greater care. The after treatment is to clear away all sources of sepsis, wash out the cavity and plug with antiseptic gauze.

Dr. W. F. Cheney said there is at present no doubt that this disease is of septic origin. This has been proved beyond question. The only treatment is to remove the endometrium, and then use douches to keep the surface aseptic.

There have been so many bad results from bichloride of mercury, and as carbolic acid, in strength sufficient to destroy cocci, acts as a corrosive to the surface, the Germans have tried lysol in ½ per cent. solution, and found it satisfactory. General treatment should always accompany local measures.

Dr. E. G. Frisbie said in one case, where he had been unable to curette for want of proper assistance, he had used pinus canadensis on pledgets of cotton, following this with a carbolized douche. The temperature rapidly fell and the patient made a good recovery.

Dr. M. A. Cachot always used solution of bichloride of mercury immediately.

Dr. F. B. Carpenter said he had been unfortunate in having several cases during the past year, where the temperature had been very high. He had exercised every precaution, and was at a loss to determine the cause of infection. Finally, he suspected that his gloves might be the means by which the germs had been conveyed. He discarded those he had been wearing, and had not subsequently seen any cases. He thought the first case was diphtheritic, as there was a diphtheritic membrane covering the os.

Dr. H M. Sherman congratulated Dr. Carpenter upon his success in finding the cause of infection within his own clothing. He inquired why he would attend a case of labor while attending one of diphtheria.

Dr. Carpenter replied that he had no fear in going from one case to another, as he used careful precautions to free himself from any poison.

Dr. McMonagle inquired what precaution the Doctor did, or could use, to prevent carrying the poison from one case to another?

Dr. Carpenter replied that he used hot bichloride solutions and hydronapthol.

Dr. Sherman agreed with Dr. McMonagle, that Dr. Carpenter had shown his methods to be entirely ineffectual. It was very difficult to avoid carrying infection, and he did not think any physician had a right to go from a case of diphtheria to one of confinement.

Dr. A. P. Woodward thought that bichloride solutions were often used stronger than were necessary; 1:4000 or 1:6000 is strong enough, and there is no danger when employed in this strength.

Dr. Ruhlman had met with retained placenta in ten or twelve cases. He did not believe that the poison always came from without, and advocated washing out the cavity and removing anything that might prove poisonous.

Dr. H. S. Orme said he was pleased to see that the younger men were so careful, but what would the men of forty years ago think of these methods. There had been a great many children born before the period of antiseptic treatment arrived.

Dr. J. R. McMurdo thought that syringing was not always satisfactory, as the nurse was often incompetent. He always curetted.

Dr. J. S. Rosenstirn said endometritis had been proved to be caused by germs (the staphylococcus). These can be injected into the uterus of an animal and the fever produced. Unfortunately we find it too often in the human family. The cocci, directly or indirectly, penetrate the interstices, and mere washing of the surface would not remove them. The rational treatment is to curette and tampon with iodoform gauze.

Dr. M. Krotoszyner said infection is very frequent, but greater when midwives conducted labor cases than when physicians attended them. The proportion being about one-third in the latter instance.

Dr. Carpenter inquired what method of curetting the uterus was employed by the different speakers. He used the dull curette and the square wire loop. He would like to know whether some employed the sharp curette.

Dr. Cheney said, according to authorities, the proper method was to go through the mucous membrane—the sharp spoon should therefore be used.

Dr. Perry, in replying, said cases had died where the cocci had penetrated the tissues. The dull curette was the safer instrument. Regarding Dr. Carpenter's observations, it is a fact that the general practitioner can not always keep clean.

REVIEWS AND NOTICES.

INTERNATIONAL CLINICS, for January, 1892, and Vol. I, second series, for 1890. Philadelphia: J. B. Lippincott Co.

The excellent quality of this quarterly volume is still maintained. Volume IV of the first series contains so many articles of interest that it is impossible to say which one is of the greatest value, for all of them are characterized by the practical features which are distinctive of clinical teaching. The chapter on the "Reduction of Temperature in Typhoid Fever" will be of interest to most readers, as it discusses the subject with reference to the effect of high temperature on individual cases, urging that this should be the guide in the line of treatment, as temperature influences different constitutions in varying degrees. The various antipyretics and cold-bath treatments are fully discussed in an impartial manner. Sir Dyce Duckworth, in his article on the "Treatment of Acute Pneumonia," assumes the ground that the term pneumonia most probably covers a *variety* of morbid conditions, which have as their prominent symptoms a grave degree of pyrexia and the physical signs of inflammation of more or less of one or of both lungs. For this reason there can be no routine treatment for any person suffering from diseases which may be similar only in name, but each case must be a study by itself. Volume I of the second series is equally fertile. It opens with a chapter by Da Costa on the "Pulmonary Complications of Influenza," a subject which the epidemics during the last three winters have made very important, and is followed by several other writers on diseases of the lungs, among whom is Theodore Williams, who contributes an excellent lecture upon the "Diagnosis of Pulmonary Tuberculosis." Dr. Williams discusses very forcibly the variation and absence of physical signs in different patients, and indicates very clearly the errors into which the physician may easily slip when making an examination of the lungs. The second series starts in well, and will add to the popularity which the work has already obtained.

THE SCIENCE AND ART OF MIDWIFERY. By William Thompson Lusk, M. A., M. D., Professor of Obstetrics and the Diseases of Women and Children in the Bellevue Hospital Medical College, Consulting Physician to the Maternity Hospital and to the Foundling Asylum, etc.; with numerous illustrations. New York: D. Appleton & Co.

The fourth edition of the Science and Art of Midwifery affords ample evidence of painstaking and conscientious revision. Largely rewritten, this treatise still preserves its identity, because the same candor, the same judicial poise, the same scientific spirit that pervaded the first edition, pervades the last. Notwithstanding the general excellence of the work, the chapter on "Premature Expulsion of the Ovum" is brief and not wholly satisfactory. By its frequency, by the importance of its immediate as well as of its remote results, abortion is easily one of the most important subjects within the whole domain of obstetrics. It should receive attention commensurate with its importance. In the consideration of extrauterine pregnancy, as elsewhere, the author refrains from dogmatism. He inclines to radical measures, however, and, even in the early months before rupture, prefers removal of the fetus to its destruction by electricity, except when the would-be operator is handicapped by surgical inexperience. The author concurs in the usual practice of severing the cord about two inches from the navel. For several years it has been our practice to tie and cut the cord as close to the umbilicus as possible and to dress the stump in absorbent cotton. In a few hours the stump forms a dry crust that falls off scaly, without offensive odor and without danger of septic infection. Grapes, rich in glucose, the muscat for instance, might well be added to the list of diuretics in eclampsia. The responsibility for septic processes in child-bed, the author believes, rests almost wholly on the physician. This opinion is obtaining a foothold among the people even, and the wise physician will govern himself accordingly. Clear, practical, concise, logical, systematic, this work certainly retains its place as one of the best obstetrical guides now extant in the English language. Prof. Lusk has certainly listened to the voice of Wordsworth,

> Come forth into the light of things,
> Let Nature be your teacher.

THE DISEASES OF THE STOMACH. By Dr. C. A. Ewald, Extraordinary Professor of Medicine at the University of Berlin; Director of the Augusta Hospital, etc. Authorized translation from the second German edition, with special additions by the author; by Morris Manges, M.A., M. D., Attending Physican to Outdoor Department Mount Sinai Hospital, New York City. With thirty illustrations. New York: D. Appleton & Co.; pp. xiv–490.

Specialists on diseases of the stomach are not uncommon in continental Europe, and of these Dr. Ewald indisputably occupies the foremost rank. The present work is the best exponent of the subject extant. While the author has striven and attained conciseness in the presentation of facts, it would nevertheless have been proper to have embodied a chapter on the anatomy and histology of the stomach. In describing the condition of the blood in cancer of the stomach, no mention is made of a diminution of hemoglobin, a condition which is of great importance in diagnosis, according to such competent investigators as Haeberlin and Boas, who maintain that whenever the hemoglobin in the blood is normal or over 60 per cent, carcinoma of the stomach is exceptionally present. Relative to the presence or absence of hydrochloric acid in the diagnosis of gastric cancer, and about which so much discussion has been developed, the author expresses himself as follows: "That with a localized cancer and an intact mucous membrane, the secretion of hydrochloric acid may continue up to a short time before death; and under such circumstances conclusions based upon the demonstration of this acid may be erroneous." And further: "That the demonstration of the presence of hydrochloric acid points with very great probability, against the existence of cancer of the stomach." Regarding the treatment of gastric ulcer, the author is very explicit. He knows but one form of treatment which holds out prospect of success, viz., rest in bed and rectal alimentation. He allows no introduction of food into the stomach for three days, too short a time, we believe, to accomplish any good. Donkin resorted to absolute rectal alimentation in many cases of gastric ulcers for twenty-three days, and we believe from our experience in such cases that for ten days, at least, no food should enter the stomach. The only inconvenience suffered by patients is from thirst, which is readily relieved by ice. Hunger is rarely complained of. The translation is at times too literal, which mars the otherwise excellent diction.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held November 1, 1892, the following physicians, having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State:

George Mathews Bergen, Los Angeles; Rush Med. Coll., Illinois, Feb. 26,'78.
Almo De Monco, Denver, Col.; Gross Med. Coll., Colorado, April 8,'90.
Charles Edgar Dorrance, Bishop; Med. Dept. Univ. of Michigan, June 30,'92.
Harrison C. Dukes, Oakland; Iowa Coll. of Phys. and Surg., Iowa, March 1,'88.
A. W. Dunbar, San Francisco; Univ. of California, Nov. 10,'91.
Harry Wyle Emerson, San Francisco; Coll. Phys. and Surg., New York, June 8,'92.
Edward S. Frost, Wilmar, Minnesota; Univ. of Pennsylvania, March 13,'68.
Warren P. Gibson, Stoney Ford; Keokuk Med. Coll., Iowa, March 8,'92.
Frank H. Moss; Los Angeles; Univ., Toronto, Canada, May 6,'92.
Scollay Parker, San Francisco; Harvard School of Med., Massachusetts, March 7,'66.
Theodore C. Rethers, San Francisco; Frederich Wilhelm's Univ., Berlin, Germany, Mar. 7,'91.
Anthony Zachary Valla, Los Angeles; Coll. of Med. of the Univ. of Southern California, April 11,'88; Royal Univ., Turin, Italy, July 25,'91.
Fred L. Wright, San Francisco; Univ., Louisville, Kentucky, March 14,'92.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from October 20, 1892, to November 20, 1892.

1st Lieut. Thomas U. Raymond, assistant surgeon, is relieved from temporary duty at Fort Walla Walla, Wash., and will return to his proper station at Vancouver Barracks. Par. 2, S. O. 169, Dept. of the Columbia, Oct. 25, 1892.

The journeys performed by 1st Lieutenant Thomas U. Raymond, assistant surgeon, from Vancouver Barracks, Wash., to Portland, Oregon, and return, on June 21 and 28, July 1, 5, 7, 8 and 9, 1892, on public business, in connection with the examination of recruits, in obedience to instructions from these headquarters, are confirmed. Par. 2, S. O. 170, Dept. of the Columbia, Oct. 29, 1892.

Leave of absence for one month, with permission to apply for an extension of three months is granted Captain L. W. Crampton, assistant surgeon. Par. 2, S. O. 179, Dept. of the Columbia, Nov. 14, 1892.

The leave of absence granted Captain Henry P. Birmingham, assistant surgeon, is hereby extended one month.

1st Lieut. Francis A. Winter, assistant surgeon, is relieved from duty at Fort Riley, Kansas, and is assigned to duty at Fort Wingate, New Mexico.

Captain Eugene L. Swift, assistant surgeon, is granted leave of absence for one month, to take effect upon expiration of present sick leave.

1st Lieut. William E. Purviance, assistant surgeon, is relieved from duty at Jefferson Barracks, Missouri, and will report in person to the commanding officer, Fort Sherman, Idaho, for duty at that post, relieving Captain William W. Gray, assistant surgeon.

So much of S. O. 230 as relates to change of station of Captain Eugene L. Swift, assistant surgeon, is suspended until further orders, and he is granted leave of absence for one month, on account of sickness, with permission to apply for an extension of one month.

1st Lieut. Nathan S. Jarvis, assistant surgeon, promoted to be assistant surgeon with rank of captain October 14, 1892, after five years service, in accordance with act of June 23, 1874.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service (District of the Pacific) from October 20, 1892, to November 20, 1892.

C. H. Gardner, assistant surgeon, relieved from duty on revenue steamer, Richard Rush, and ordered to report for duty to officer in command of service at San Francisco, Cal., October 13, 1892. Ordered to Portland for temporary duty October 28, 1892.

J. B. Young, assistant surgeon, Portland, Or., granted leave of absence for 21 days, October 28, 1892.

ITEMS.

Alvarenga Prize.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about $180, will be made on July 14, 1893, provided that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered. Essays intended for competition may be upon any subject in medicine, but cannot have been published, and must be received by the Secretary of the College on or before May 1, 1893. Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper, and within it the name and address of the author. It is a condition of competition that the successful essay, or a copy of it, shall remain in possession of the College; other essays will be returned upon application within three months after the award. The Alvarenga Prize for 1892 has been awarded to Dr. R. H. L. Bibb, of Saltillo, Mexico, for his essay entitled: "Observations on the Nature of Leprosy."

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